

Summary of Changes

Publication 52, *Hazardous, Restricted, and Perishable Mail*

Effective April 2022, Publication 52, *Hazardous, Restricted, and Perishable Mail*, has been updated with the following changes:

| The chapter, subchapter, part, appendix, or section... | titled... | was... | in <i>Postal Bulletin</i> issue number... | with an issue date of... |
|--|---------------------|--|---|--------------------------|
| Chapter 4, Restricted Matter | | | | |
| 453.37 | Hemp-based Products | Revised to update the hemp mailer laboratory test result records retention period and add a provision that hemp and hemp-based products, including Cannabidiol (CBD), are prohibited in mailings to international locations. | 22579 | 8-26-21 |
| | | Revised to include a correction to the second paragraph of the revision referenced above. The revised text was corrected to read that the maximum allowable limit for tetrahydrocannabinol (THC) concentration is 0.3 percent for hemp-based products. | 22581 | 9-23-21 |



Hazardous, Restricted, and Perishable Mail

Publication 52

April 2022
Transmittal Letter

- A. Purpose.** Publication 52, *Hazardous, Restricted, and Perishable Mail*, provides important information to help mailers determine what may be mailed and how certain items must be packaged to keep the mail safe. It also provides guidance to Postal Service™ employees accepting this mail.

Publication 52 is available on Postal Explorer® at <http://pe.usps.com>.

Customers may also consult their local postmaster or manager of business mail entry for additional information about hazardous materials in the mail.

- B. Effective Date.** This edition is effective April 2022. All previous issues of Publication 52 are obsolete.

C. Availability.

Public: The public can access Publication 52 in PDF and HTML formats on Postal Explorer at <http://pe.usps.com>.

Postal Service: Postal Service employees can access Publication 52 in PDF and HTML formats on the USPS Web site.

- D. How to Use This Book.** An introduction is located at the beginning of the book. It explains the purpose and scope of the book, as well as the need to protect Postal Service employees and customers from potentially dangerous materials in the mail. In the appendices, we have included a hazardous materials table, packaging instructions for mailable materials, and a glossary of terms.

- E. Comments.** Contact your local Post Office™, business mail entry office, or the Pricing and Classification Service Center (PCSC) with comments or questions about our mailing standards (see DMM 608.8.4 for addresses and telephone numbers of business mail entry offices and the PCSC).

A handwritten signature in dark ink that reads "Steven W. Monteith".

Steven W. Monteith
Vice President
Marketing

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1 Introduction

11 Purpose

111 General

The purpose of this publication is to provide information and guidance when mailing potentially hazardous, restricted, or perishable matter to domestic and international destinations.

Certain potentially undesirable, harmful, or dangerous matter is nonmailable by statute or regulation. The standards for nonmailable articles and substances and the special conditions under which some of these articles and substances may be mailed can be found in this publication.

These regulations apply to the military postal system, its employees, and undelivered mail that is or has been in the official custody of this system and its employees.

The regulations for nonmailable matter in written, printed, or graphic form are covered in DMM 601.8.0, 508.9.0, and 508.10.0.

112 Use

This publication is designed for use by mailers and for employees in business mail entry, retail units, marketing, and other functional areas that are involved with providing mailability information to Postal Service customers.

Follow the standards contained in this publication when deciding whether and under what conditions hazardous materials, restricted matter, and perishable matter are permitted to be mailed.

The content of this publication is based on former DMM standards which have been incorporated into this publication, as well as regulations of federal agencies in effect at the time of publication. Future changes to the federal regulations may supplement, amend, or supersede the content of this publication.

113 Other Reference Sources

No single guide could provide all the details necessary for the safe acceptance and handling of every item that is classified as hazardous material, restricted matter, or perishable matter. This publication provides specific mailability requirements, where possible, for those categories of harmful materials that present significant danger or which are frequently presented for mailing.

Particular matter may be mailable under postal statutes and regulations, but customers may have responsibilities under nonpostal statutes and regulations concerned with possession, treatment, transmission, or transfer of such matter (e.g., 49 CFR 100-185 [Department of Transportation Regulations]; the Comprehensive Drug Abuse Prevention and Control Act of 1970 [Public Law 91-513], 21 U.S.C. 801, et seq.; and the Gun Control Act of 1968 [Public Law 90-618], 18 U.S.C. 921, et seq.).

In writing this publication, the following sources were used:

Postal Service

- *Mailing Standards of the United States Postal Service, Domestic Mail Manual (DMM).*
- *Mailing Standards of the United States Postal Service, International Mail Manual (IMM).*
- *Postal Operations Manual (POM).*
- *Administrative Support Manual (ASM).*
- Publication 14, *Prohibitions and Restrictions on Mailing Animals, Plants, and Related Matter.*
- Handbook EL-812, *Hazardous Materials and Spill Response.*
- *Aviation Mail Security, Management Instructions.*
- Notice 107, *Let's Keep the Mail Safe.*
- Poster 298, *DOT Hazardous Materials Warning Labels and Markings.*

Other Sources

- Title 18 of the United States Code (U.S.C.) 921, 1715, 1716 (18 U.S.C. 921, 1715, 1716).
- 39 U.S.C. 3001-3002a, 3005, 3008-3010, 3012, 3014, 3015, 3017, 3018.
- 21 U.S.C. 801-830 (drugs).
- 7 U.S.C. 7701 (plant pests).
- 7 U.S.C. 7760 (plants).
- Title 29 *Code of Federal Regulations* (29 CFR), Occupational Safety and Health Administration (OSHA), U.S. Department of Labor.
- 42 CFR, Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC).
- 49 CFR, Parts 100-185, U.S. Department of Transportation (DOT).
- International Civil Aviation Organization (ICAO), *Technical Instructions for the Safe Transport of Dangerous Goods by Air.*
- International Air Transport Association (IATA), *Dangerous Goods Regulations.*

Where appropriate, the names and addresses of agencies where more detailed information can be obtained are provided in this publication.

12 Scope

121 **General**

The scope of this publication extends to all articles and materials that are nonmailable because they may harm people or property or that have mailing restrictions imposed upon them by the regulations of other governmental agencies.

Under 18 U.S.C. 1716 all matter that is outwardly or of its own force dangerous or injurious to life, health, or property is nonmailable. The knowing deposit of such matter in the mail is a crime punishable by fine, imprisonment, or other penalty. However, certain hazardous materials and otherwise restricted and perishable matter may be mailed under the conditions permitted in this publication.

122 **Hazardous, Restricted, and Perishable**

The following are examples of hazardous materials, restricted matter, and perishable matter. These are not complete lists, but they provide an idea of the types of articles included in each category.

- a. Hazardous materials (section 3) include:
 - (1) Explosives.
 - (2) Gases.
 - (3) Flammable liquids and combustible liquids.
 - (4) Flammable solids.
 - (5) Oxidizers and organic peroxides.
 - (6) Toxic substances (poisons) and infectious substances, etiologic agents, clinical specimens, biological products, sharps, other used medical devices.
 - (7) Radioactive materials.
 - (8) Corrosives.
 - (9) Miscellaneous hazardous materials (e.g., lithium batteries, dry ice, magnetized materials).
- b. Restricted matter (section 4) includes:
 - (1) Intoxicating liquors.
 - (2) Firearms.
 - (3) Building construction materials.
 - (4) Liquids and powders.
 - (5) Matter emitting obnoxious odors.
 - (6) Cremated remains.
 - (7) Motor vehicle master keys.
 - (8) Controlled substances and drugs.
 - (9) Hemp and CBD products.
 - (10) Sharp objects (knives, switchblades, stilettos).
 - (11) Unsolicited promotional items.

- (12) Tobacco products.
- c. Perishable matter (section 5) includes:
 - (1) Dead animals or parts of animals.
 - (2) Eggs.
 - (3) Live animals.
 - (4) Meat and meat products.
 - (5) Plants and plant products.

123 Mailability Premise

123.1 Basic Premise

The basic premise of the postal mailability statutes is that anything “which may kill or injure another, or injure the mails or other property...” is nonmailable. Several statutory exceptions to this rule permit mailings of otherwise nonmailable matter under specified conditions. Statutory exceptions apply to live scorpions, poisonous drugs and medicines, poisons for scientific use, switchblade knives, firearms, motor vehicle master keys, locksmithing devices, and abortive and contraceptive devices. The statutes also provide that the USPS may, by regulation, permit the mailing, under required conditions of preparation and packing, of potentially harmful matter not “outwardly or of [its] own force dangerous or injurious to life, health, or property.” The regulations in this publication summarize the statutory prohibitions and exceptions; detail the mailability standards that apply to perishable, hazardous, and restricted matter; contain information on the mailability of specific hazardous materials; and describe the conditions of preparation and packaging under which the USPS accepts for mailing potentially harmful matter that is otherwise nonmailable.

123.2 Restricted Matter — General

Restricted matter is an article or substance prohibited or limited by Title 18, U.S. Code (liquors, abortive and contraceptive devices, odd-shaped items in envelopes, motor vehicle master keys, and locksmithing devices). It also includes matter not otherwise described in this publication that is restricted by 18 U.S.C. 1716(a) because it may, under conditions encountered in the mail, be injurious to life, health, or property (obnoxious odors, liquids, powders, and battery-powered devices).

123.3 Harmful Matter — General

Except as provided in this publication, any article, composition, or material is nonmailable if it can kill or injure another or injure the mail or other property. Harmful matter includes, but is not limited to:

- a. All types and classes of poisons, including controlled substances.
- b. All poisonous animals except scorpions mailed for medical research purposes or for the manufacture of anti-venom (or antivenin or antivenene); all poisonous insects; all poisonous reptiles; and all types of snakes, turtles, and spiders.
- c. All disease germs or scabs.

- d. All explosives, flammable material, infernal machines, and mechanical, chemical, or other devices or compositions that may ignite or explode.

123.4 **Hazardous Materials**

Harmful matter also includes regulated hazardous materials that are likely to harm USPS employees or to destroy, deface, or otherwise damage mail or postal equipment. This includes materials such as caustic poisons (acids and alkalis), oxidizers, or highly flammable liquids, gases, or solids; or materials that are likely, under conditions incident to transportation, to cause fires through friction, absorption of moisture, or spontaneous chemical changes or from retained heat from manufacturing or processing, including explosives or containers previously used for shipping high explosives with a liquid ingredient (such as dynamite), ammunition, fireworks, radioactive materials, matches, or articles emitting obnoxious odors.

123.5 **Other Nonmailable Matter**

Matter is nonmailable also when it cannot be delivered because of an illegible, incorrect, or insufficient address, or when it does not meet USPS standards for mail preparation, classification, postage prices, size, or weight.

13 Additional Information

Although the Postal Service makes every effort to inform its customers of the mailability of particular harmful matter via the DMM standards and the information in this and other publications, it is the responsibility of the mailer to fully meet all requirements prior to mailing. See [212](#) for more complete information on the responsibilities of mailers.

The authority of Postal Service personnel to decide whether particular articles or substances presented for mailing are nonmailable is stated in [213](#).

14 Safety

The handling and transport of hazardous materials, restricted matter, and perishable matter involves added levels of risk. That risk can become even greater if a nonmailable material is mailed or if the packaging of a mailable material is not adequate to prevent damage or spillage during normal handling.

Under no circumstances may any nonmailable hazardous material, restricted matter, or perishable matter be deposited for mailing. Mailable items must be packaged and labeled as required in the applicable DMM standards and the regulations in this publication.

A Postmaster may take any step reasonable and necessary to protect USPS employees and equipment from potentially dangerous or injurious materials or substances found in the mail. USPS employees may refuse an article for mailing if the content of the article is described by the mailer or otherwise revealed to be nonmailable.

The Postal Service's primary purpose in requiring proper packaging, identification, and deposit of mailable hazardous materials, restricted matter, or perishable matter is to ensure the safety of our employees and the general public who may come into contact with these mailpieces. These requirements also are intended to ensure the safety of Postal Service equipment and facilities.

15 Protecting Personnel

All reasonable and necessary steps must be taken to protect Postal Service personnel and equipment from the effects of potentially dangerous or injurious materials or substances found in the mail, as stated in ASM 223.4.

16 Military Postal System

Unless excepted, standards in this publication apply to the military postal system, its personnel, and undelivered mail that is or has been in the official custody of that system and its personnel. References to the Inspection Service refer to the Postal Inspection Service and its authorized employees, not to military investigative services.

17 Statutory System

18 U.S.C. 2510, et seq., constitutes a statutory system of regulating interception of wire, oral, or electronic communications. Any person contemplating the mailing of a device primarily useful for surreptitiously effecting such interception should consider the provisions of 18 U.S.C. 2510, et seq., particularly section 2512. This statute makes it a crime, except as otherwise provided in 18 U.S.C. 2510, et seq., for a person intentionally to send through the mail any device whose design that person knows, or has reason to know, renders the device primarily useful for surreptitious interception of wire, oral, or electronic communications. The statute does not declare that such a device in itself constitutes nonmailable matter but, as indicated, provides criminal penalties for the act of intentionally mailing it.

18 Trademarks of the USPS

181 Use of USPS Trademarks

USPS trademarks must be used in the form listed in this section. Proper use of any USPS trademarks may require capitalizing the initial letters, or all the letters of the acronym, to distinguish them from terms not used as trademarks. Words and phrases that are registered trademarks may also use the registration symbol ®; words and phrases that are not registered but are still USPS trademarks may use the ™ symbol. If the registration or ™ symbol is *not* used, a reference should be placed at the beginning or end of the document, indicating the marks that are used in the publication with the following notation: “The following marks are among the many marks belonging to the U.S. Postal Service and are not an exhaustive list”:

We list the marks in lieu of using the ® symbol throughout Publication 52.

| | | | |
|----------------------------|--------------------------------|-----------------------------------|------------------------------|
| 1-800-Ask-USPS | FastForward | Parcel Select | Standard Mail |
| Air Mail | First-Class Mail | Parcel Select Lightweight | U.S. Postage Paid |
| Business Reply Mail | First-Class Mail International | PC Postage | The Postal Service |
| Certified Mail | Forever | PFS | The Postal Store |
| Click-N-Ship | Global Express Guaranteed | Pickup on Demand | U.S. Postal Service |
| Click-N-Ship for Business | GXG | Postal Explorer | United States Postal Service |
| Commercial Base | IMb | PostalPro | USPS |
| Commercial Plus | IMb Tracing | Premium Forwarding Service | USPS Delivery Confirmation |
| Critical Mail | IMM | Priority Mail | USPS Electronic Postmark |
| DMM | Intelligent Mail | Priority Mail Express | USPS ePacket |
| EDDM | International Surface Air Lift | Priority Mail Flat Rate | USPS Package Intercept |
| EDDM Retail | IPA | Priority Mail International | USPS Returns |
| ePacket | ISAL | Priority Mail Open and Distribute | USPS Web Tools |
| EVS | Market Mail | Priority Mail Regional Rate | USPS.com |
| e-VS | Media Mail | Priority Mail Regional Rate Box | ZIP |
| Express Mail International | MERLIN | Priority Mail Returns | ZIP+4 |
| FAST | Parcel Post | Return to Sender | |

182 Common Law Marks or USPS Marks with Pending Trademark Applications

The following is a list of Common Law Marks or USPS marks with pending trademark applications that appear throughout Publication 52. The TM may be used after these marks and the same trademark rules apply whenever these services or terms appear in the DMM. **Note:** this list changes frequently and some of these marks will become registered and require the [®]:

| | | | |
|---|---|---|------------------------|
| ACS | M-Bag | Priority Mail 3-Day Delivery | Registered Mail |
| Carrier Pickup | Open and Distribute | Priority Mail 3-Day Delivery Guaranteed | Signature Confirmation |
| CASS | Parcel Select Regional Ground | Priority Mail 3-Day | USPS Retail Ground |
| CASS Certified | P.O. Box | Priority Mail Express | U.S. Mail |
| Courtesy Reply Mail | PO Box | Priority Mail Express 1-Day | US Postage Paid |
| Delivery Confirmation | Post Office | Priority Mail Express 2-Day | US Postal Service |
| FCPIS | Post Office Box | Priority Mail Express 3-Day | USPS |
| First-Class | Postal Service | Priority Mail Express DPO | USPSCA |
| First-Class Package | Postmaster General | Priority Mail Express Flat Rate Box | USPS Corporate Account |
| First-Class Package International Service | POSTNET | Priority Mail Express International | USPS Picture Permit |
| First-Class Package Service | Priority Mail 1-Day Delivery | Priority Mail Express Military | USPS Tracking |
| IMb | Priority Mail 1-Day Delivery Guaranteed | Priority Mail Express Offshore | USPSCA |
| IMb Tracing | Priority Mail 1-Day | Priority Mail Express Open and Distribute | ZIP Code |
| IMRS | Priority Mail 2-Day Delivery | Priority Mail International | |
| International Business Reply | Priority Mail 2-Day Delivery Guaranteed | QBRM | |
| International Priority Airmail | Priority Mail 2-Day | Qualified Business Reply | |

2 General Guidelines

21 Mailability

211 General

Under 18 U.S.C. 1716, all matter that is outwardly or of its own force dangerous or injurious to life, health, or property is nonmailable. The knowing deposit of such matter in the mail is a crime punishable by fine, imprisonment, and/or other penalty.

For reasons of safety, most hazardous materials are nonmailable. However, some hazardous materials and otherwise restricted matter, or perishable matter are permitted to be mailed when the requirements in this publication are fully met.

Chapter [3](#), Appendix [A](#), and Appendix [C](#) of this publication provide detailed information about hazardous materials that are permitted to be mailed and the conditions that apply.

Chapters [4](#) and [5](#) of this publication provide information about restricted matter and perishable matter that either is nonmailable or that may be mailable under specified conditions, as applicable.

Chapter [6](#) specifies the mailing conditions that apply to hazardous materials, restricted matter, and perishable matter in international mail, including hazardous materials for delivery to overseas military and diplomatic Post Office (APO/FPO/DPO) addresses.

Chapter [7](#) contains information regarding mailability of hazardous materials, restricted matter, and perishable matter in domestic mail via air transportation.

Regardless of content, a mailpiece bearing only postage stamps as the postage payment method and weighing more than 10 ounces or measuring more than one-half inch thick may not be deposited into a collection box, Postal Service lobby drop, Postal Service dock, customer mailbox, or other unattended location. A city, rural, or highway contract letter carrier may not pick up these mailpieces for delivery, either from an individual or through Pickup on Demand service. The sender must present such items to an employee at a retail service counter in a Postal Service facility. Improperly presented items will be returned to the sender for proper entry and acceptance.

212 **Mailer Responsibility**

All mailers, including mail service providers and other mailer agents, must comply with applicable Postal Service laws and regulations governing mailability and preparation for mailing, as well as nonpostal laws and regulations on the shipment of particular matter.

The Postal Service disseminates information about mailing standards by publishing the DMM and IMM and by providing this and other publications that give additional guidance to mailers.

Mailers need to be aware of current or new regulations adopted by the Postal Service and other governmental agencies.

213 **Authority**

A Postmaster has the authority to decide whether articles and substances other than written, printed, or graphic matter are nonmailable and, where appropriate, is authorized to refuse to accept for mailing such matter determined to be nonmailable. Postmasters may consult with the Pricing and Classification Service Center (PCSC) in making these determinations.

PRICING AND CLASSIFICATION SERVICE CENTER
90 CHURCH ST STE 3100
NEW YORK NY 10007-2951
TELEPHONE: (212) 330-5300 / FAX: (212) 330-5320

214 **Appeals**

A mailer who receives an adverse decision from a Postmaster may file a written appeal with the PCSC (see [213](#) for address), which issues the final agency decision. When an initial ruling is issued by the PCSC, the mailer may appeal to the manager, Product Classification, USPS Headquarters, Washington, DC, who has the authority to render a final decision on the appeal.

A mailer may file a written appeal of a final Postal Service agency decision with the USPS Recorder, Judicial Officer, under the rules of procedure in 39 CFR 953.

MANAGER, PRODUCT CLASSIFICATION
U.S. POSTAL SERVICE
475 L'ENFANT PLAZA SW RM 4446
WASHINGTON DC 20260-5015

RECORDER
JUDICIAL OFFICER
U.S. POSTAL SERVICE
2101 WILSON BLVD STE 600
ARLINGTON VA 22201-3078

215 Requests for Rulings

215.1 General

Mailability decisions are based on Postal Service statutes and regulations in effect at the time the ruling is issued. Over time, some rulings may become obsolete or require modification to conform to changes in applicable laws and regulations. When rulings are issued, the requirements of other governmental agencies (e.g., U.S. Department of Transportation, Centers for Disease Control and Prevention) may be taken into consideration to the extent that they are consistent with Postal Service policy and authority.

Requests for rulings must contain specific items of critical information appropriate to the category of the material, as noted in [215.2](#), [215.3](#), and [324](#).

215.2 Hazardous Materials

Acceptability for mailing hazardous materials depends on many factors, such as the container fluid/vapor capacities, the ability of the complete mailpiece to contain the material, and the method of absorbing and containing the material in case of accidental leakage of the primary receptacle.

To determine mailability of a specific material, a mailer must submit a material safety data sheet (MSDS) (see Appendix [D](#)) and the following information to the PCSC (see [213](#) for address):

- a. Common and proper shipping name of the material, hazard class, and the assigned United Nations (UN) or North American (NA) identification number.
- b. Chemical composition by percentage of weight.
- c. Flashpoint.
- d. Toxic properties.
- e. Irritant action when inhaled, swallowed, or with contact to skin or eyes.
- f. Special precautions necessary to permit handling without harm to USPS employees or damage to property or other mail.
- g. Explanation of warning labels and shipping papers required by local, state, or federal regulations.
- h. Description of the proposed packaging method, including the addressing, required markings, and documentation.
- i. Volume of material per mailpiece, proposed number of pieces to be mailed, class of mail, and post office(s) of mailing.

The hazards present with chemicals and other types of hazardous materials may not be readily apparent. Materials classified under one hazard class can present additional or subsidiary hazards more commonly associated with a different hazard class. For example, swimming pool chemicals may cause fires or release poisonous fumes or be corrosive or poisonous. Therefore, it is essential when determining mailability to correctly identify the material based on the mailer-supplied documentation (i.e., the MSDS and other information) and never to assume a general designation using unsubstantiated information.

215.3 Restricted Matter or Perishable Matter

To obtain a ruling on the mailability of restricted or perishable matter, a mailer should provide the mailing office with following:

- a. Detailed description of the restricted or perishable matter.
- b. Special precautions necessary to permit handling without harm to Postal Service employees or damage to property.
- c. Proposed method of packaging.
- d. Explanation of any local, state, or federal regulations that apply to shipping such matter.
- e. Quantity per mailpiece and per mailing, frequency of mailing, and post office(s) of mailing.

When information about restricted or perishable matter is insufficient to make a mailability determination, or when there is doubt about the mailability of a particular item, contact the PCSC.

216 Nonmailable Matter Found in the Mail

Specific items, such as firearms, switchblade knives, controlled substances, motor vehicle master keys, and explosive or incendiary devices, generally are prohibited for mailing. When these types of nonmailable items are found in the mailstream, they must be handled in accordance with POM 139.117, by referring to the Postal Inspection Service.

Other materials found in the mail that are believed to be nonmailable must be treated under the applicable conditions in POM 139.117-18 and ASM 223.4.

22 Marking Requirements

221 General

To avoid rejection of the mailpiece by Postal Service acceptance personnel or air carriers, mailers must ensure that their packages meet all applicable labeling, marking, and ancillary endorsement requirements.

221.1 Address Side of Mailpiece

Hazardous materials and restricted or perishable matter, unless specifically excepted in [222](#), must be clearly marked, labeled and identified on the address side of the mailpiece (see [325.1](#) and DMM section 102.1.1 and 202.1.1). Only in limited situations where sufficient space does not exist, DOT markings may be placed on a side adjacent to the address. Markings and labels must not be placed on the bottom of a package or envelope. Other markings required by the Postal Service or other federal regulatory agencies also must appear on the address side of any mailpiece containing hazardous material, restricted matter, or perishable matter as specified in [325.1](#). Required markings must be applied with an insoluble material or other material that cannot be rubbed off or smeared.

221.11 Return Address

Except for diagnostic specimen mailpieces using a Business Reply Mail format, and nonregulated materials, a return address that includes the sender's name and address must appear on all packaging containing hazardous, restricted, or perishable mail.

221.12 Content Markings

When required, the contents also must be clearly identified on the address side. The contents must be disclosed to be mailable. A mailability determination may be required based on the mailer's disclosure concerning the contents at the time of mailing.

221.2 Ancillary Endorsements

A mailer endorsement may be used to request forwarding, return, or address correction service for items that are undeliverable as addressed (see DMM 507).

Standard Mail and Parcel Select Lightweight pieces containing hazardous materials must bear the endorsement "Address Service Requested," "Forwarding Service Requested," or "Return Service Requested."

First-Class Mail, First-Class Package Service, Priority Mail, Standard Mail, USPS Retail Ground, Package Services, or Parcel Select (including Parcel Select Lightweight) pieces containing hazardous materials cannot use "Change Service Requested."

222 Matter Excepted From Markings

If permitted to be mailed under Chapter [4](#), the following materials are excepted from the content requirements in [221](#) and must be mailed with no indication or identifying marking on the outside of the parcel:

- a. Controlled substances and drugs.
- b. Firearms.
- c. Motor vehicle master keys.
- d. Switchblade knives.

223 Hazardous Materials Warning Labels and Markings

Most hazardous materials permitted in the mail fall in the Limited Quantity/Consumer Commodity categories. Eligible Limited Quantity materials intended for surface transport must display a Limited Quantity (square-on-point) surface marking. Limited Quantity materials intended for air transport must display a DOT Limited Quantity marking square-on-point with the symbol "Y" in the center, and may also require a specific DOT diamond-shaped hazardous material warning label and other markings. See [Exhibit 325.4](#). For specific information on hazardous materials warning labels and marking requirements, see [325](#).

224 **Tag 44 for Hazardous Materials**

Category B infectious substances are the only type of hazardous materials permitted to be placed in a sack or tub. All mailpieces must be properly marked with the proper shipping name “Biological Substance, Category B” and “UN3373” inside a diamond marking as outlined in [346.22a](#). A sack or tub containing Category B infectious substances must have attached Tag 44, *Sack Contents Warning*. The tag must be removed when the Category B infectious substances are no longer in the sack or tub. See Chapter [7](#) for more information.

225 **Other Postal Service Labels and Tags**

The Postal Service provides these labels and tags for affixing to the outside of mailpieces containing bees, live animals, or perishable matter:

- a. Label 27, *Bee Ware!*
- b. Label 28, *Live Animals*.
- c. Tag 9, *Perishable — Do Not Delay*.
- d. Label 127, *Surface Transportation Only*.

226 **Package Orientation Markings**

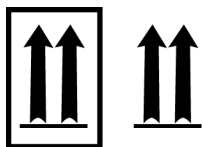
Outer packaging that contains a primary receptacle (and secondary packaging, when required) of a liquid or other spillable material must be packed with the closure of the primary receptacle positioned upward.

The outer packaging must be plainly and legibly marked on two opposite sides with a package orientation marking consisting of two underlined arrows that point in the correct upright position.

Optionally, the two arrows may be enclosed in a rectangle. Specifications for package orientation markings are in 49 CFR 172.312. See [Exhibit 226](#) for examples.

Exhibit 226

Package Orientation Markings



Note: Either design is acceptable.

227 **Old Markings**

Under 49 CFR 173.29, a container that previously held a hazardous material is considered the same as a full container of the material. A container improperly identified by content is not acceptable for mailing. Some potentially hazardous, restricted, and prohibited matter is nonmailable by statute or regulation. Because of safety concerns and in compliance with laws governing the transportation of hazardous, restricted, and prohibited materials, as well as privacy statutes, the Postal Service must assume that all markings and labels on a package identify the actual content.

Reused packaging, boxes, and containers that bear inapplicable labels or markings associated with hazardous, prohibited, or restricted materials are prohibited in the mailstream, unless the labels or markings have been removed or completely obliterated. If the labels or markings can still be read or identified, they are not sufficiently obliterated. See [Exhibit 227](#).

Exhibit 227

Reused Packaging



Incorrect Procedure



Correct Procedure

If labels or markings have not been sufficiently obliterated, the package must be handled as though it contains the indicated contents. Frequently, these types of packages must be handled as nonmailable hazardous materials and must be isolated and removed from the mailstream.

Examples of commonly reused boxes include cleaning supply boxes and liquor/wine/beer boxes. Some cleaning products are hazardous materials; although most alcoholic beverages are not hazardous materials, they are prohibited from mailing. Packages containing alcoholic beverages or with alcoholic beverage markings are prohibited in the mail.

Postal Service employees may not remove, cross out, or obliterate labels or markings, even if asked to do so by a mailer. Only the mailer or mailer's authorized representative may alter or obliterate the labels or markings.

228 Shipping Papers

Mailable hazardous materials eligible to be sent by Priority Mail Express, Priority Mail, First-Class Mail, or First-Class Package Service must be packaged, labeled, and appropriately documented for air transportation, as required by federal regulations and section [22](#).

Mailable hazardous materials sent via air transportation (except materials identified under [346.2](#)) must be accompanied with a shipper's declaration for dangerous goods (shipping paper) completed in triplicate and signed by the mailer.

Air carriers may reject mailpieces that are not accompanied by the required shipping papers. See [326](#) and [Exhibit 326](#) and Chapter [7](#) for more information.

23 Handling Hazardous Materials

A potentially dangerous situation exists whenever hazardous materials, restricted matter, or perishable matter is being moved from one place to another. Careless handling can result in serious injury to the general public and Postal Service personnel, damage to other mail and Postal Service equipment, and delays in processing and delivery of mail.

The *Postal Operations Manual* (POM) provides additional instructions for handling hazardous materials in the mail.

24 Emergency Procedures

241 General Requirements

Incidents involving the release of hazardous materials, restricted matter, or perishable matter may cause death, injury, and damage to property. Such incidents can be avoided or minimized if appropriate preventive measures are taken or correct emergency procedures are followed.

MI EL-810-2006-3, *Response to Hazardous Materials Releases*, and Handbook EL-812, *Hazardous Materials and Spill Response*, provide guidelines for responding to emergency situations. Postal Service employees involved in the flow of mailpieces containing harmful matter must follow these guidelines from the point of deposit to the point of delivery.

242 Hazard Duration

Frequently, the effects of exposure resulting from damage, spillage, or leakage of harmful matter are not obvious or readily apparent. For example, infectious substances, radioactive material, corrosives, and poisons can cause illness or injury that may become known to the victim gradually and long after the incident.

243 Precautions

During any spill or leak incident, or when damage is detected involving harmful items, Postal Service personnel must take every precaution to protect other personnel and property from visible and invisible effects of the material involved. These procedures are to be followed:

- a. Identify harmful properties of the material (based on the markings) and determine the precautions to be taken.
- b. Provide adequate personal protection to employees who must handle the materials.
- c. Contain and transport leaking containers for disposal.
- d. Clean and decontaminate facilities and machinery.

Refer to MI EL-810-2006-3, *Response to Hazardous Materials Releases*, and Handbook EL-812, *Hazardous Materials and Spill Response*, for specific instructions.

244 Procedures

During any incident involving harmful matter where there is actual or suspected damage to a mailpiece or its contents, Postal Service personnel must follow the specific procedures in Handbook EL-812, *Hazardous Materials and Spill Response*, and as outlined below:

- a. Isolate the damaged package immediately and restrict the area. If the incident occurs in a facility or on the equipment of an air carrier, immediately brief the carrier on the nature and quantity of the materials released.
- b. Contact the supervisor or designated qualified employee, who can take prompt and appropriate measures to protect life and prevent injury, loss, or damage. They will determine whether it is an incidental spill that can be handled by the facility spill and leak team or an emergency spill that will require implementation of the emergency action plan. If mail sealed against inspection must be opened for this purpose, act in accordance with ASM 274.
- c. Remove any injured or contaminated person from the area with as little physical contact as possible:
 - (1) Limit any first aid to what is absolutely necessary, until a qualified physician is present.
 - (2) Direct all personnel exposed to radioactive materials to wash all exposed body areas immediately with cold water and immediately report to a physician for an examination.
- d. If the spill is determined to be an emergency, contact the fire department, the police, a qualified physician, and/or the appropriate agencies equipped to handle specific situations.
- e. Avoid smoke, fumes, or dust. Segregate any clothing or tools used in fighting fires until they can be checked for contamination.
- f. Do not eat, smoke, or drink in the affected area.
- g. Do not place involved areas in service until the appropriate authorities have determined that the areas are free of all contamination.
- h. Notify the PCSC or Postal Service Inspection Service, as appropriate under POM 139.117–118 (see [216](#)). A report must be made for any incident that includes damage to mail or property, or injury to personnel. An online Mailpiece Incident Report (MIR) must be completed and filed in accordance with the instructions in the Safety Toolkit, based on the incident type.

245 Hazardous Chemical Emergencies

CHEMTREC (Chemical Transportation Emergency Center) is a service of the Chemical Manufacturers Association that provides immediate information and advice 24 hours a day, 7 days a week, for those at the scene of transportation emergencies involving chemicals.

Postal Service personnel are authorized to telephone CHEMTREC day or night, toll free, at 800-424-9300. For calls originating within the state of Virginia or outside the continental United States, telephone 703-527-3887.

CHEMTREC usually can provide hazard guidance and information warnings when given only the name of the product and the nature of the problem. CHEMTREC also follows up by promptly contacting the shipper of the chemicals involved for more detailed assistance. CHEMTREC does not provide on-site emergency response.

CHEMTREC may request the following information in an emergency call:

- a. Caller's name, title and organization, and callback number at scene.
- b. Description of incident and actions taken.
- c. Type and number of injuries/exposures.
- d. Material involved, including:
 - (1) Name of the product(s), preferably a trade name.
 - (2) Shipper and point of destination.
 - (3) Consignee and destination (delivery address).
- e. Type or description and number of containers/packages.
- f. Specific information you need right away (MSDSs, medical help, etc.)
- g. Size of or amount of release.
- h. Location, time, weather at the scene.

246 **Emergency Telephone Numbers**

Following are telephone numbers for use during normal business hours (unless otherwise noted) for the indicated types of emergencies:

CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC)
(for etiologic agents and biohazard materials) 404-633-5313

CHEMICAL TRANSPORTATION EMERGENCY CENTER
(CHEMTREC)

(for Chemical Spills - 24 hours a day, 7 days a week)
800-424-9300 (in continental United States; outside Virginia)
703-527-3887 (within Virginia or outside the continental United States)

CROPLIFE AMERICA
(for Herbicides, insecticides, Fungicides, and similar products)
202-296-1585

U.S. DEPARTMENT OF TRANSPORTATION (DOT)
NATIONAL RESPONSE CENTER
(for Chemical and Oil Spills)
202-267-2675 (within Washington DC)
800-424-8802 (outside Washington DC)

25 Basic Guidelines for Acceptance and Dispatch

251 Guidelines for Acceptance Personnel

Postal Service personnel may not open mail sealed against inspection except under the circumstances described in ASM 274. Accordingly, knowledge of the content of such mail may be obtained directly from the mailer (e.g., a mailer may ask questions about mailing requirements or mark the outside of the mailpiece to indicate the contents) or indirectly through leakage or other escape of the contents. Subject to the applicable restrictions, acceptance personnel must:

- a. Determine the mailability of all hazardous materials, perishable matter, or otherwise restricted matter offered for mailing at a retail unit or business mail entry unit (BMEU). This process must include a thorough inspection of all sides of the mailpiece for evidence of hazardous materials (e.g., markings). At retail units, mailers must be asked the question: “Does this parcel contain anything fragile, liquid, perishable, or potentially hazardous, including lithium batteries and perfume?”
- b. If the contents are mailable, determine the specific quantity limitations, labeling, and packaging requirements that apply.
- c. Refuse (as permitted in POM 139) to accept any material that does not meet the applicable requirements for mailing and refer the circumstances to your local Postmaster or PCSC for a mailability ruling under [213](#) or [215](#), as appropriate.
- d. If the parcel containing a diagnostic (clinical) specimen is in a sack or tub, PS Tag 44 must be attached to ensure that the sack will be emptied at the processing point. Dispatch all mailable hazardous materials as applicable to the class and content of each mailpiece.

See Chapter [7](#) for guidelines Postal Service acceptance personnel should follow when handling hazardous materials, restricted matter, or perishable matter to be transported by air.

252 Guidelines for Dispatch Personnel

The following guidelines for Postal Service dispatch personnel are general in nature. Specific dispatch procedures for Postal Service operational employees are in the POM and applicable to the class and content of the mailpiece.

- a. Make sure that the hazardous material, restricted matter, or perishable matter is given proper handling to avoid damage or danger.
- b. Tender to the air carrier only those mailpieces that are properly packaged and marked. Before a shipment is tendered to a carrier, make sure that:
 - (1) A proper and strong packaging method is used.
 - (2) A secure method of package closure is used, and there is no visual evidence of leakage or damage. (If damage is detected, isolate the damaged mailpiece and notify the appropriate

personnel in case of accident or incident and for proper spill response.)

- (3) The outer packaging bears all required markings and/or labels.
- (4) A properly completed shipping paper is attached to the outside of the mailpiece and to the dispatch document. The shipping paper must include the information detailed in [326](#) and [Exhibit 326](#).
- (5) If the mailpiece contains a material believed to be nonmailable, separate it from the rest of the mail to avoid introduction into the mailstream and treat it in accordance with POM 139.117-118, as appropriate.

See Chapter [7](#) for more information regarding the air transportation of mailable hazardous materials, restricted matter, or perishable matter.

3 Hazardous Materials

31 Definition

A hazardous material is any article or substance designated by the U.S. Department of Transportation as being capable of posing an unreasonable risk to health, safety, or property during transportation. In international commerce, hazardous materials are known as “dangerous goods.” For definitions of other terms that relate to hazardous materials, see Appendix [D](#).

32 General

321 **U.S. Department of Transportation**

The U.S. Department of Transportation (DOT) is the federal agency responsible for regulating the carriage of hazardous materials within the United States via any mode of transportation (e.g., highway, rail, air, water). The federal regulations of the DOT are codified in Title 49 *Code of Federal Regulations* (49 CFR), which contains the DOT’s detailed specifications for packaging, marking, and labeling hazardous materials. Title 49 CFR also exempts or establishes other requirements for limited quantities and small quantities of hazardous materials. USPS mailing standards for hazardous materials generally adhere to 49 CFR, but also include many additional limitations and prohibitions.

322 **Postal Service**

The carriage of U.S. Mail by the Postal Service is regulated by Title 39 *Code of Federal Regulations* (39 CFR) and is not subject to the federal regulations in 49 CFR that apply to commercial carriers. Unlike commercial carriers, the Postal Service is subject to the restrictions in Title 18 *United States Code 1716* (18 U.S.C. 1716), which prohibits from mailing all matter that is outwardly or of its own force dangerous to life, health, or property (see [211](#)). As a result, most hazardous materials are nonmailable.

Accordingly, for legal and safety reasons, although mailing standards for hazardous materials in this publication closely adhere to 49 CFR, the standards also include many additional limitations and prohibitions and often are more restrictive than the requirements of other commercial carriers. For example, 49 CFR allows commercial shippers to send flammable materials by air, but the Postal Service prohibits the mailing of all flammable materials via air transportation.

Postal Service standards generally limit the mailing of hazardous materials to Limited Quantity surface materials or Limited Quantity air materials as defined in [332](#) through [336](#), that meet USPS quantity limitations and packaging requirements. This allowance is limited to the following:

- a. Toy propellant devices and safety fuses in Division 1.4S, as permitted in [341.22](#).
- b. Toxic substances in Division 6.1 that have an LD50 for oral toxicity of greater than 5 mg/kg but less than 50 mg/kg, as permitted in [346.231](#).
- c. Infectious substances (etiologic agents) and medical wastes in Division 6.2, as permitted in [346.23](#).
- d. Radioactive materials in Class 7 that fall within the specific activity limits permitted in [347](#) and [Exhibit 347.22](#).
- e. Lithium batteries, dry ice, and magnetized materials, as permitted in [349](#).

323 Mailer Responsibility

Full responsibility rests with the mailer to comply with all Postal Service and non-Postal Service laws and regulations in the mailing of hazardous material. Anyone who mails, or causes to be mailed, a nonmailable or improperly packaged hazardous material can be subject to legal penalties (i.e., fines and/or imprisonment), including but not limited to, those specified in 18 U.S.C. The transport of hazardous materials prior to entry as U.S. Mail and after receipt from the Postal Service is subject to DOT regulations.

324 Mailability Rulings

For information on how to request a mailability ruling for a specific hazardous material, follow the procedures outlined in [215.2](#).

325 DOT Hazardous Materials Warning Labels and Markings

325.1 General Requirements

All required hazardous materials warning labels and markings must be placed on the address side of the package. Only in limited situations where sufficient space does not exist, DOT markings may be placed on a side adjacent to the address. Markings and labels must not be placed on the bottom of a package or envelope. Other markings required by the Postal Service or other federal regulatory agencies also must appear on the address side of any mailpiece containing hazardous material, restricted matter, or perishable matter. Specific text markings that are required, must be printed on the address side of the package.

All DOT hazardous materials warning labels and markings must be:

- a. Displayed on the same surface of the package and near the proper shipping name.
- b. Displayed next to each other (within six inches) when more than one marking or label is required.

- c. Printed on or affixed to a background of contrasting color or must have a dotted or solid line outer boundary.
- d. Clearly visible; and not obscured by any mark or attachment.
- e. Durable and weather-resistant.
- f. Oriented as a diamond (square-on-point).
- g. At least 100 mm (3.9 inches) on each side, unless specified in [325.1](#) and [325.4](#).
- h. Printed with solid line inner border at least 5mm inside and parallel to the edge, and the border widths must be at least 2 mm.

Limited Quantity or UN3373 markings may be permitted to be displayed at a reduced size with special authorization from the manager of Product Classification. (see [214](#) for address).

325.2 **Nonmailable Warning Labels and Marks**

In commerce, packages containing hazardous materials must display the appropriate DOT hazardous materials warning label and markings. Except as provided in Exhibit 325.3, any mailpiece bearing or required to bear one of the labels shown in Exhibit 325.2 under 49 CFR, is prohibited from mailing.

Note: The labels shown in the exhibits are not shown to size. DOT warning labels must meet the size and color requirements in 49 CFR §172.407 through 172.446 unless special authorization from the Manager, Product Classification is obtained as outlined in [325.1](#).

Exhibit 325.2

DOT Hazardous Materials Warning Labels: PROHIBITED IN THE MAIL

* Include appropriate compatibility group letter.

** Include appropriate division number and compatibility group letter.



325.3 Mailable Warning Labels

The warning labels shown in [Exhibit 325.3a](#), [Exhibit 325.3b](#), and [Exhibit 325.4](#) may appear only on mailpieces containing mailable hazardous materials that require use of the label under Postal Service requirements. Division 5.1, 5.2, Class 8 and Class 9 labels are only permitted when used in conjunction with a Limited Quantity air mark.

Exhibit 325.3a

DOT Hazardous Materials Warning Labels: PERMITTED ON MAILABLE HAZARDOUS MATERIALS



Biological Substance
Category B



Regulated Medical Waste



Exhibit 325.3b

DOT Hazardous Material Warning Labels: PERMITTED FOR MAILABLE LIMITED QUANTITIES ONLY



(Must only be used in conjunction with DOT limited quantity markings and only when permitted for the applicable hazard class. See 34, Mailability by Hazard Class.)

325.4 Limited Quantity Markings

Unless specified in [221.1](#) and [325.1](#), each mailpiece containing a mailable hazardous material must be plainly and durably marked on the address side with the required shipping name and UN identification numbers.

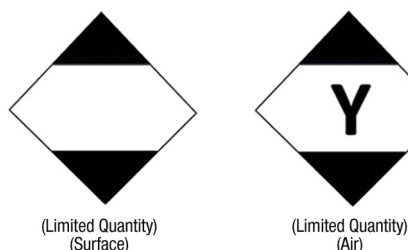
Requirements for the use of DOT Limited Quantity markings intended for air and surface transportation are as follows:

- a. Marking description: The top and bottom portions of the square-on-point marking and the border forming the square-on-point marking must be black and the center must be white or of a suitable contrasting background. See [Exhibit 325.4](#).
- b. Markings must be durable, legible, and readily visible.

- c. The border forming the square-on-point marking must be at least 2 mm (0.08 inch) in width and the minimum dimension of each side of the marking must be 100 mm (3.94 inches), unless the package size requires a reduced size marking of no less than 50 mm (1.97 inches) on each side.
- d. The application of a smaller size (50 mm or 25 mm with a DOT-Special Permit) Limited Quantity mark on packages regardless of the size are permitted with restrictions and require a prior written approval from the manager of Product Classification (see [214](#) for address).
- e. For transportation by aircraft, the air Limited Quantity mark must have the symbol “Y” in black color inside the center of the square-on-point mark and be clearly visible. Mailpieces intended for transport by air must also be marked with the proper shipping name and identification number, and display the appropriate DOT-associated marking when required for the hazard class shipped in accordance in this publication.
- f. For surface transportation, a Limited Quantity ground mark (square-on-point) is not required to include the proper shipping name and identification number.

Exhibit 325.4

DOT Hazardous Material Warning Labels: PERMITTED FOR LIMITED QUANTITY SQUARE-ON-POINT

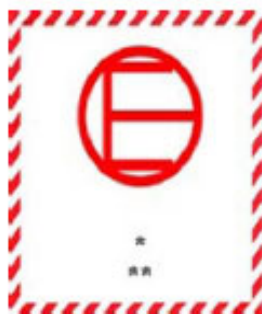


325.5 Excepted Quantity Labels

Hazardous materials eligible to be shipped under the excepted quantity provision, as described in 49 CFR 173.4a and 337.2, must be prepared following Packaging Instruction 10B in Appendix C. Each mailpiece must bear a DOT-approved excepted quantity marking, shown in Exhibit 325.4, under the following conditions:

- a. The “*” must be replaced by the primary hazard class, or when assigned, the division of each of the hazardous materials contained in the package.
- b. The “***” must be replaced by the name of the mail owner or mail service provider if not shown elsewhere on the package.
- c. The marking must be located on the address side of the mailpiece, not be less than 3.9 inches (100 mm) by 3.9 inches (100 mm), and must be durable and clearly visible.

Exhibit 325.5

Excepted Quantity Marking**326 Shipping Papers**

A shipping paper is defined as a shipping order, bill of lading, waybill, manifest, or any other document used to identify a hazardous material being offered for transport. A shipper's declaration for dangerous goods (shipping paper) prepared under 49 CFR 172.200 through 172.205 is required for certain types of hazardous materials when mailed. A sample form is shown in [Exhibit 326](#). The shipping paper must be completed and signed in triplicate by the mailer. It must be affixed to the outside of the mailpiece within an envelope or similar carrier that can be easily opened and resealed to allow viewing of the document. Shipping papers are required as follows:

- a. *Air Transportation.* Most mailable hazardous materials must be accompanied by a shipper's declaration for dangerous goods (shipping paper). To determine which mailable hazardous materials require a shipping paper when sent via air transportation, refer to the appropriate sections in this chapter and the appropriate Packaging Instruction in Appendix [C](#).
- b. *Surface Transportation.* Certain mailable hazardous material may require a properly prepared shipping paper. To determine which mailable hazardous materials require a shipping paper when sent via surface transportation, refer to the appropriate sections in this chapter, and the appropriate Packaging Instruction in Appendix [C](#).

Neither DOT nor the Postal Service makes blank shipper's declaration forms available to shippers of hazardous materials. It is the responsibility of the shipper to obtain forms meeting the format specifications in 49 CFR from commercial printers, vendors, or internet retailers. The shipper is also responsible for properly completing the form prior to mailing.

Exhibit 326

Shipper's Declaration for Dangerous Goods (Sample Form)

| SHIPPER'S DECLARATION FOR DANGEROUS GOODS | | | | | (Provide at least two copies to the airline.) | | |
|--|--------------------------|---------------------|----------------------|--|---|----------------------|----------------------|
| Shipper | | | | Air Waybill No. Page of Pages Shipper's Reference Number <small>(optional)</small> | | | |
| Consignee | | | | | | | |
| <i>Two completed and signed copies of this Declaration must be handed to the operator</i> | | | | WARNING Failure to comply in all respects with the applicable Dangerous Goods Regulations may be in breach of the applicable law, subject to legal penalties. This Declaration must not, in any circumstances, be completed and/or signed by a consolidator, a forwarder or an IATA cargo agent. | | | |
| TRANSPORT DETAILS This shipment is within the limitations prescribed for: <small>(delete non-applicable)</small> | | | | Airport of Departure <div style="border: 1px solid black; padding: 2px; display: flex; justify-content: space-between;"> PASSENGER AND CARGO AIRCRAFT CARGO AIRCRAFT ONLY </div> | | | |
| Airport of Destination: | | | | Shipment type: (delete non-applicable) <div style="border: 1px solid black; padding: 2px; display: flex; justify-content: space-between;"> NON-RADIOACTIVE RADIOACTIVE </div> | | | |
| NATURE AND QUANTITY OF DANGEROUS GOODS | | | | | | | |
| Dangerous Goods Identification | | | | | | | |
| Proper Shipping Name | Class or Division | UN or ID No. | Packing Group | Subsidiary Risk | Quantity and Type of packing | Packing Inst. | Authorization |
| | | | | | | | |
| Additional Handling Information <div style="text-align: right; font-size: small;">24 hr. Emergency Contact Tel. No. _____</div> | | | | | | | |
| I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. | | | | | Name/Title of Signatory Place and Date Signature <small>(see warning above)</small> | | |

327 Transportation Requirements

327.1 General

- a. *Air Transportation.* Mailable hazardous materials eligible for air transportation must be sent as Priority Mail Express, Priority Mail, First-Class Mail, or First-Class Package Service, as permitted. Mailpieces must be prepared to meet all requirements that apply to air transportation. Mailpieces must be properly packaged and labeled within DMM requirements and the operator variations of the air carrier. When required, a shipper's declaration for dangerous goods must be affixed to the outside of the mailpiece. Refer to the *Technical Instructions for the Safe Transport of Dangerous Goods by Air* of the International Civil Aviation Organization (ICAO) for air carrier operator variations.

Note: Mailable hazardous materials that are prohibited from air transportation may not be sent as Priority Mail Express, Priority Mail, First-Class Mail, or First-Class Package Service.

- b. *Surface Transportation.* All mailable hazardous materials eligible to be sent as Standard Mail, USPS Retail Ground, Parcel Select, or Package Services must be prepared under the requirements that apply to surface transportation. A mailpiece containing mailable hazardous material with postage paid at Standard Mail, USPS Retail Ground, Parcel Select, or Package Services prices must not, under any circumstance, be transported on air transportation.

327.2 Air Transportation Prohibitions

All mailable hazardous materials sent as Priority Mail Express, Priority Mail, First-Class Mail, or First-Class Package Service, must meet the requirements for air transportation. The following types of hazardous materials are always prohibited on air transportation regardless of class of mail:

- a. Explosives.
- b. Anything susceptible to damage or that can become harmful because of changes in temperature or atmospheric pressures unless protected against the effects of such changes.
- c. Magnetic material that has a field strength sufficient to cause a compass deviation at a distance of 7 feet or more from any point on the outer packaging.
- d. Flammable materials (gases, liquids, and solids).
- e. Radioactive materials.
- f. UN3090 lithium metal batteries (including lithium alloy batteries) and UN3480 lithium-ion batteries (including lithium polymer batteries).
- g. Materials excluded from air shipment by DOT regulations (49 CFR 100-185) or of the applicable state (country) or air carrier operator variations.

328 **Postal Service Hazardous Materials Table**

Appendix [A](#), “[Hazardous Materials Table: Postal Service Mailability Guide](#),” contains a modified version of the DOT Hazardous Materials Table found in 49 CFR 172.101. Appendix [A](#) lists the hazardous materials from 49 CFR and identifies eligibility for mailing in the domestic mail via air and surface transportation. The table can be used to determine the mailability of a hazardous material if the proper shipping name of the material is known. When only the UN number is known, Appendix [B](#), “[Numerical Listing of Proper Shipping Names by Identification \(ID\) Number](#),” can be used to locate a proper shipping name for cross referencing back to Appendix [A](#).

The mailability information in Appendix [A](#) is based on the Department of Transportation requirements in this publication and past Postal Service mailability rulings. The table does not include specific information for international mail because almost all hazardous materials are prohibited in international mail. See Chapter [6](#) for the specific requirements that apply to international mail.

33 Hazard Classes

331 **Nine Classes**

Every hazardous material is assigned to one of nine hazard classes as defined in 49 CFR 172.101 and 173. The nine hazard classes are as follows:

- a. Class 1: Explosives.
- b. Class 2: Gases.
- c. Class 3: Flammable and Combustible Liquids.
- d. Class 4: Flammable Solids.
- e. Class 5: Oxidizing Substances, Organic Peroxides.
- f. Class 6: Toxic Substances and Infectious Substances.
- g. Class 7: Radioactive Materials.
- h. Class 8: Corrosives.
- i. Class 9: Miscellaneous Hazardous Materials.

Some of the nine hazard classes are further separated into divisions based on their physical or chemical properties. For postal purposes, [Exhibit 331](#) summarizes the mailability of hazardous materials by hazard class.

Exhibit 331

DOT Hazard Classes and Postal Mailability

| Class | Name of Hazard Class (and Division when applicable) | Domestic Mail | | International Mail and APO/FPO/DPO Mail |
|----------|---|--|--|--|
| | | Air Transportation | Surface Transportation | |
| 1 | Explosives | | | |
| | Division 1.1: Mass Explosive Hazard | Prohibited | Prohibited | Prohibited |
| | Division 1.2: Projection Hazard | Prohibited | Prohibited | Prohibited |
| | Division 1.3: Fire and/or Minor Blast/ Minor Projection Hazard | Prohibited | Prohibited | Prohibited |
| | Division 1.4: Minor Explosion Hazard | Prohibited | Only with prior HQ approval per 341.2c | Prohibited |
| | Division 1.5: Very Insensitive With Mass Explosion Hazard | Prohibited | Prohibited | Prohibited |
| | Division 1.6: Extremely Insensitive; No Mass Explosion Hazard | Prohibited | Prohibited | Prohibited |
| 2 | Gases | | | |
| | Division 2.1: Flammable Gases | Prohibited | Only Limited Quantity Surface material per 342 | Prohibited |
| | Division 2.2: Nonflammable Gases | ID8000 material per 342 | Only Limited Quantity Surface material per 342 | Prohibited |
| | Division 2.3: Toxic Gases | Prohibited | Prohibited | Prohibited |
| 3 | Flammable and Combustible Liquids | | | |
| | All Flammable Liquids | Prohibited | Only Limited Quantity Surface material per 343 | Prohibited |
| | All Combustible Liquids | ID8000 material per 343 | Only Limited Quantity Surface material per 343 | Prohibited |
| 4 | Flammable Solids | | | |
| | Division 4.1: Flammable Solids | Prohibited | Only Limited Quantity Surface material per 344 | Prohibited |
| | Division 4.2: Spontaneously Combustible | Prohibited | Only Limited Quantity Surface material per 344 | Prohibited |
| | Division 4.3: Dangerous When Wet | Prohibited | Only Limited Quantity Surface material per 344 | Prohibited |
| 5 | Oxidizing Substances, Organic Peroxides | | | |
| | Division 5.1: Oxidizing Substances | Only Limited Quantity Air material per 345 | Only Limited Quantity Surface material per 345 | Prohibited |
| | Division 5.2: Organic Peroxides | Only Limited Quantity Air material material per 345 | Only Limited Quantity Surface material per 345 | Prohibited |

Exhibit 331

DOT Hazard Classes and Postal Mailability

| Class | Name of Hazard Class (and Division when applicable) | Domestic Mail | | International Mail and APO/FPO/DPO Mail |
|----------|---|--|---|---|
| | | Air Transportation | Surface Transportation | |
| 6 | Toxic Substances and Infectious Substances | | | |
| | Division 6.1: Toxic Substances | ID8000 material per 346; other poisons as permitted in 346.231 | Only Limited Quantity Surface material per 346; other poisons as permitted in 346.231 | Prohibited |
| | Division 6.2: Infectious Substances | Only as permitted in 346 | Only as permitted in 346 | Only First-Class Package International Service with Registered Mail service per 622 |
| 7 | Radioactive Material | Prohibited | Only per 347 | Only First-Class Package International Service with Registered Mail service per 622 |
| 8 | Corrosives (Liquids And Solids) | Only Limited Quantity Air material per 348 | Only Limited Quantity Surface material per 348 | Prohibited |
| 9 | Miscellaneous Hazardous Materials ID8000 materials, UN3077, UN3082, UN3334, or UN3335 materials | ID8000 material and other materials as permitted in 349 | Only Limited Quantity Surface material and other materials as permitted in 349 | Prohibited, except for magnetized materials per 349 and 622.4 and lithium batteries per 622.5 |

332 **Limited Quantity**

A *limited quantity* of a hazardous material is the maximum amount of a specific hazardous material exempted from DOT labeling or packaging requirements in 49 CFR. To be eligible to ship under the DOT Limited Quantity provision, a hazardous material must list an exception in column 8A of the Hazardous Materials Table in 49 CFR 172.101. *Not every hazardous material is eligible to be shipped as a limited quantity.*

Under Postal Service requirements, only certain hazard classes and divisions may be eligible to ship as a Limited Quantity. A material meeting the eligibility criteria for shipment as a Limited Quantity material is mailable via ground (surface) and in some instances air transportation, only if it can be further reclassified as a Consumer Commodity material. It is the responsibility of the mailer to know the correct DOT hazard class of a hazardous material before mailing (see [323](#)). When assistance is needed to determine eligibility for mailing, the mailer may request a ruling from the PCSC as outlined in [215](#).

333 Consumer Commodity

Consumer commodity is a hazardous material that is packaged and distributed in a quantity and form intended or suitable for retail sale and designed for consumption by individuals for their personal care or household uses. This term can also include certain drugs or medicines.

Not all hazardous material permitted to be shipped as a Limited Quantity qualify as a consumer commodity. The Postal Service does not apply the consumer commodity category to materials intended for air transportation in Hazard Class 5, Class 8, and portions of Class 9. (see 334). The Consumer Commodity category is unique to the United States, and its use is prohibited with international mail.

It is the responsibility of the mailer to know the correct DOT hazard class of a hazardous material before mailing (see [323](#)).

When assistance is needed to determine eligibility for mailing, the mailer may request a ruling from the PCSC as outlined in [215](#).

334 USPS Limited Quantity Air Materials

The USPS Limited Quantity Air classification applies to certain hazardous materials within Hazard Classes 5, 8, and 9 that are permitted specifically in the Postal Service for air transport. The Limited Quantity air category and marking may be used in domestic mail only and is prohibited in international mail.

It is the responsibility of the mailer to know the correct DOT hazard class of a hazardous material before mailing (see [323](#)).

When assistance is needed to determine eligibility for mailing, the mailer may request a ruling from the PCSC as outlined in [215](#).

335 ID8000 Materials

A miscellaneous hazardous class specific to certain materials within Classes 2, 3, 6.1, and 9 that can qualify as a mailable consumer commodity material and are reclassified as ID8000 when intended for air transportation is permitted for domestic mail, subject to the applicable 49 CFR requirements. Mailpieces must bear the DOT square-on-point marking including the symbol “Y,” Identification Number “ID8000,” the proper shipping name “Consumer Commodity,” and an approved DOT Class 9 hazardous material warning label.

336 USPS Limited Quantity Surface Materials

This category is only applicable for materials that present a limited hazard during transportation due to its form, quantity, and packaging. It is intended for surface transportation and is unique to domestic Postal Service networks. Limited Quantity Surface Materials are prohibited in Priority Mail Express, Priority Mail, First-Class Package Service, and all classes of international mail. In addition, placing surface transportation labels or associated text markings on any air-eligible mail service to circumvent air transportation is prohibited. These materials generally must also qualify as a consumer

commodity to be permitted in the Postal Service network. This material includes those that were previously classified as *ORM-D (Other Regulated Material)*. See [332](#) and Appendix [A](#).

337 Excepted Quantity

337.1 Definition

An *excepted quantity* is a defined amount of a specific hazardous material, eligible for transport aboard passenger aircraft, which is not subject to any DOT requirements (e.g., packaging, marking, labeling, etc.) other than those in 49 CFR 173.4a. *Very few hazardous materials can be shipped under the excepted quantity provision.* Additionally, for Postal Service purposes, Class 1, Class 2, Class 4, Division 6.2, and Class 7 materials are not permitted to be sent as an excepted quantity. The excepted quantity provision is applicable to domestic mail only, and its use is prohibited for international shipments or APO/FPO/DPO mail. The excepted quantity provision can be used in domestic air or surface transportation (highway, rail, or vessel).

337.2 Mailability

Only materials authorized for transport aboard passenger aircraft in accordance with 49 CFR 172.101 and appropriately classed within one of the following hazard classes or divisions may be mailed as an excepted quantity:

- a. Class 3, Packing Groups II and III;
- b. Division 5.1, Packing Groups II and III;
- c. Division 5.2 materials, only when contained in a chemical kit, first aid kit, or polyester resin kit;
- d. Division 6.1, Packing Group III only;
- e. Class 8, Packing Groups II and III only, except for UN2803, *Gallium* and UN2809, *Mercury*; and
- f. Class 9, except for UN1845, *Carbon dioxide, solid, or Dry ice*, and lithium batteries.

337.3 Additional Restrictions

Materials identified in Appendix A as prohibited under column E, *USPS Mailability*, are ineligible for mailing under the excepted quantity provision without regard to their hazard class, division, or packing group.

337.4 Quantities

The maximum quantity of hazardous materials in each inner (primary) packaging is limited to 30 g (1 ounce) or 30 ml (1 ounce) for solids or liquids. The maximum aggregate quantity of hazardous material in any mailpiece cannot exceed:

1. For Packing Group II materials and Class 9 materials, 500 g (1.1 lbs.) for solids or 500 ml (.1 gallon) for liquids.
2. For Packing Group III materials, 1 kg (2.2 lbs.) for solids or 1 liter (0.2 gallon) for liquids.
3. For Division 5.2 materials, 500 g (1.1 lbs.) for solids or 500 ml (.1 gallon) for liquids.

337.5 Packaging and Marking

Hazardous materials eligible to be shipped under the excepted quantity provision, as described in 49 CFR 173.4a and 337.2, must be prepared following Packaging Instruction 10B in Appendix C. Mailers entering mailpieces under the USPS excepted quantity provision must meet the requirements for packaging materials, and mailpieces must be in compliance with the package tests regulations in 49 CFR 173.4a. Each mailpiece must bear a DOT-approved Excepted Quantity marking (see [221.1](#) and [325.5](#)). If applicable, include documentation as provided in 49 CFR § 173.4a.

338 Packaging Requirements for Hazardous Materials**338.1 DOT Packing Groups**

Hazardous materials in Classes 3, 4, 5, Division 6.1, Class 8 and some Class 9 substances are assigned to a DOT packing group based on the degree of danger presented by the material during transport. The packing group assigned to a hazardous material is listed in column 5 of the Hazardous Material Table in 49 CFR 172.101 and in column (d) of Appendix A. Packaging Group designators are always written in Roman numerals, for example PG II. Packing Group I indicates a great danger, Packing Group II a medium danger, and Packing Group III a minor danger.

338.2 Postal Service Packaging Instructions

For mailing purposes, the packaging of a mailable hazardous material must follow the appropriate Packaging Instruction in Appendix C. The correct Packaging Instruction to use for a specific hazardous material can be determined using Appendix A.

Mailers may not package or combine hazardous materials assigned to different hazard classes within a single mailpiece unless permitted by Postal Service standard.

339 Nonmailable Materials Found in the Mailstream

When any mailpiece containing a nonmailable hazardous material is found in the mailstream, the procedures in POM 139.117 must be followed if the materials present an immediate threat to persons or property. When there is not immediate threat to persons or property, follow the procedures in POM 139.118.

34 Mailability by Hazard Class

341 Explosives (Hazard Class 1)**341.1 Definition**

An *explosive* is any substance or article, including a device, that is designed to function by explosion (an extremely rapid release of gas and heat) or that, by chemical reaction within itself, is able to function in a similar manner even if not designed to function by explosion, unless the substance or article is otherwise classed under the provisions in 49 CFR.

341.11 Class 1 Divisions

Hazard Class 1 has six divisions as follows:

- a. *Division 1.1* consists of explosives that have a mass explosion hazard. Examples are black powder, nitroglycerine (desensitized), dynamite, most types of torpedoes, and mercury fulminate.
- b. *Division 1.2* consists of explosives that have a projection hazard but not a mass explosion hazard. Examples are certain types of fireworks, some types of detonating fuses, and some types of ammunition.
- c. *Division 1.3* consists of explosives that have a fire hazard and either a minor blast or minor projection hazard or both, but not a mass explosion hazard. Examples are sodium picramate, some liquid and solid propellants, and some rocket motors.
- d. *Division 1.4* consists of explosives that present a minor blast hazard. Examples are common fireworks, toy caps, empty primed grenades, and some small arms ammunition.
- e. *Division 1.5* consists of very insensitive explosives that have a mass explosion hazard. Examples are type E blasting agents, some type B blasting agents, and very insensitive explosive substances.
- f. *Division 1.6* consists of extremely insensitive articles that do not have a mass explosion hazard.

341.12 Class 1 Compatibility Codes

Each division in Class 1 is further assigned a compatibility group code. The compatibility code consists of one letter (A–H, J–L, N, or S) that is positioned after the division number (e.g., 1.1A, 1.2C, 1.4S) and refers to the transportation and storage controls necessary to prevent potential hazards. See 49 CFR 173.52 for a more detailed description of the Class 1 compatibility codes.

341.2 Mailability, Packaging, and Marking

Explosives are generally prohibited from mailing under 18 U.S.C. 1716. The following conditions apply to the mailing of explosives:

- a. *International Mail.* All explosives are prohibited.
- b. *Domestic Mail via Air Transportation.* All explosives are prohibited.
- c. *Domestic Mail via Surface Transportation.* Generally, explosives are prohibited. The only exceptions are for Division 1.4S toy propellant devices and safety fuses that have been approved by the manager, Product Classification, USPS Headquarters, Washington, DC, prior to mailing as stated in [341](#). A shipping paper is required.

341.21 Nonmailable Explosives

Nonmailable explosives found in the mailstream must be immediately reported in accordance with POM 139.117.

Nonmailable explosives include, but are not limited to, the following:

- a. *Common Fireworks.* Fireworks are classified as Division 1.1, 1.2, 1.3, or 1.4 explosives depending on the degree of hazard. Fireworks include roman candles, skyrockets, helicopter-type rockets, cylindrical and

cone fountains, pyrotechnic wheels, illuminating torches, firecrackers, salutes, and combinations of items that are designed to produce any of the aforementioned types of effects. All types of fireworks are prohibited from mailing.

- b. *Fuses*. Fuses are classified as Division 1.3 or 1.4 explosives depending on the degree of hazard. All types of fuses (except safety fuses as permitted under [341.22](#)) are prohibited from mailing.
- c. *Small Arms Ammunition*. Ammunition is classified as a Division 1.1, 1.2, 1.3, or 1.4 explosive, depending on the degree of hazard. Ammunition that is regulated as a Class 1 explosive and designed to be fired from a pistol, revolver, rifle, or shotgun, as well as associated primers and blank cartridges (including those designed for tools) and propellant powder for use in any firearm, is prohibited from mailing.

341.22 **Mailable Explosives**

The following specific types of explosives may be mailed only when the applicable conditions are met. Full responsibility rests with the mailer to comply with Bureau of Alcohol, Tobacco, Firearms and Explosives (BATFE) regulations before mailing.

- a. *Toy Propellant Devices*. The proper shipping name for a toy propellant device is “model rocket motor” or “igniters.” A toy propellant device assigned UN0454 or NA0323 and classed as a Division 1.4S explosive is eligible for mailing in domestic mail via surface transportation only when prior written permission has been obtained from the manager, Product Classification, USPS Headquarters, Washington, DC. A device approved for mailing is subject to the following conditions:
 - (1) Each device must be ignitable by electrical means only; contain no more than 30 g (1.07 oz) of propellant; and produce less than 80 newton seconds of total impulse with thrust duration not less than 0.050 second.
 - (2) Each device must be constructed so that all chemical ingredients are preloaded into a cylindrical paper or similarly constructed nonmetallic tube that does not fragment into sharp, hard pieces; must be designed so that it will not burst under normal conditions of use; must be incapable of spontaneous ignition under 500° F; and must not contain any type of explosive or pyrotechnic warhead other than a small, activation-charge, parachute-recovery system.
 - (3) Each mailpiece containing approved devices must be prepared for mailing following Packaging Instruction 1A in Appendix [C](#). A shipper’s declaration for dangerous goods is required.
- b. *Safety Fuses (UN0105)*. Safety fuses consist of a core of black powder over-spun with yarns, waterproofing compounds, and/or tapes. Safety fuses assigned UN0105 as a Division 1.4S explosive may be mailed in domestic mail via surface transportation only when prior written approval has been granted by the manager, Product Classification, USPS Headquarters, Washington, DC. Mailable safety fuses must be

prepared using Packaging Instruction 1B in Appendix [C](#). A shipper's declaration for dangerous goods is required.

Note: "Safety Fuses" are not to be confused with "fusees." Fusees are rail and highway distress signals that are nonmailable Class 4 flammable solids.

- c. *Shotgun Hulls, Empty Casings, Nonmetallic Shotgun Hulls, or Casings Without Primers.* These articles are not classified as explosives or hazardous materials under 49 CFR and, therefore, are mailable subject to the applicable mailing rules (see [227](#)).

342 Gases (Hazard Class 2)

342.1 Definition

Hazard Class 2 consists of three divisions:

- a. *Division 2.1, Flammable Gases.* A material that is a gas at 68° F (20° C) or less and 14.7 psi (101.3 kPa) of pressure. Flammable gases also include materials that have a boiling point of 68° F (20° C) or less at 14.7 psi (101.3 kPa) and that are ignitable at 14.7 psi (101.3 kPa) when in a mixture of 13 percent or less by volume with air or that have a flammable range at 14.7 psi (101.3 kPa) with air of at least 12 percent regardless of the lower limit. These conditions must be established in accordance with ASTM E681–85, *Standard Test Method for Concentration Limits of Flammability of Chemicals*, or other approved equivalent method. The flammability of aerosols must be determined using the tests specified in 49 CFR 173.306(i).
- b. *Division 2.2, Nonflammable, Nontoxic Gases.* A material that does not meet the definition of Division 2.1 or 2.3 and exerts in its packaging an absolute pressure of 40.6 psia (280 kPa) or greater at 68° F (20° C).
- c. *Division 2.3, Toxic Gases.* A material that is poisonous by inhalation and is a gas at 68° F (20° C) or less and a pressure of 14.7 psi (101.3 kPa), or a material that has a boiling point of 68° F (20° C) or less at 14.7 psi (101.3 kPa).

342.2 Mailability

The following conditions apply to the mailing of gases:

- a. *International Mail.* All gases are prohibited.
- b. *Domestic Mail via Air Transportation.* Flammable gases in Division 2.1 and toxic gases in Division 2.3 are prohibited. Nonflammable gases in Division 2.2 are generally permitted if the material can qualify as a ID8000 material (see [335](#)) and meet the quantity limitations and packaging requirements in [342.3](#) and [342.4](#).
- c. *Domestic Mail via Surface Transportation.* Toxic gases in Division 2.3 are prohibited. Flammable gases in Division 2.1 and nonflammable gases in Division 2.2 are generally permitted if the material can qualify as a Limited Quantity surface material and meet the quantity limitations and packaging requirements in [342.3](#) and [342.4](#).

342.21 Nonmailable Gases

When any gas that is nonmailable is discovered in the mailstream, the procedures in POM 139.117 must be followed if the materials present an immediate threat to persons or property. The procedures in POM 139.118 are followed when there is no immediate threat to persons or property.

The following are some specific types of nonmailable gases:

- a. *Cigarette Lighters (NA1057)*. Generally, lighters charged with fuel and having an ignition system or any similar heating, lighting, or ignition device are a Class 3 flammable liquid and are nonmailable. However, if an approval number is obtained from DOT, consideration for mailing may be requested from the manager, PCSC under the provisions in [343.25](#).
- b. *Oxygen, Refrigerated Liquid*. Liquid oxygen (UN1073) is prohibited from mailing under any circumstances.
- c. *Fire Extinguishers*. Fire extinguishers (UN0275, UN0276, UN0323, or UN0381) that contain propellant explosives are prohibited from mailing.
Note: See [342.22](#) for mailable types of fire extinguishers.
- d. *Toxic Gases*. All Division 2.3 toxic gases are prohibited from mailing.

342.22 Mailable Gases

The following are examples of mailable gases:

- a. *Butane*. Butane (UN1011) and Receptacles, small (UN2037) with butane or butane mixtures are Division 2.1 flammable gases. Butane gases that qualify as a Limited Quantity surface material are acceptable only in domestic mail via surface transportation when properly prepared under [342.3](#) and Packaging Instruction 2A in Appendix [C](#).
- b. *Oxygen, Compressed*. Oxygen (UN1072) is a Division 2.2 nonflammable gas and is acceptable in domestic mail only if it can qualify as a Limited Quantity material. The requirements in [342.3](#) and Packaging Instruction 2B in Appendix [C](#) must be followed.
- c. *Propane*. Propane is a Division 2.1 flammable gas and is acceptable in domestic mail via surface transportation only if it can qualify as a Limited Quantity ground material. The requirements in [342.3](#) and Packaging Instruction 2A in Appendix [C](#) must be followed. Propane is nonmailable in domestic mail via air transportation.
- d. *Fire Extinguishers*. Extinguishers that contain a Division 2.2 nonflammable compressed gas and are assigned UN1044 are mailable if they do not contain methyl bromide gas mixtures and the contents are held in DOT specification 2P or 2Q containers. Only one extinguisher per mailpiece is permitted, and the compressed gas contained within the fire extinguisher must be nonflammable, nonpoisonous, or noncorrosive as required under 49 CFR 173.309(a). The requirements in Packaging Instruction 2B in Appendix [C](#) must be followed.

Note: Fire extinguishers assigned UN1774 are mailable as Class 8 corrosives subject to the limitations for corrosives in [348](#).

- e. *Empty Compressed Gas Containers.* Empty used containers of compressed gas are mailable subject to the same restrictions that applied when the container was filled (because residual amounts of the hazardous material might remain present). Empty, unused (i.e., new) containers are mailable without restriction.
- f. *Aerosol Paint Products.* Aerosol paint products that are defined as flammable compressed gases are acceptable in the domestic mail via surface transportation only if they can qualify as a Limited Quantity ground material and meet the quantity limitations and applicable packaging requirements in [342.3](#) and [342.4](#).
- g. *Other Mailable Gases.* Materials whose contents are under pressure, such as carbonated beverages, biological/medical products, cosmetics, foodstuffs and soaps, electronic tubes, and audible fire alarm systems (except for any that may contain poisonous gases or others that may be specifically excluded by 49 CFR 173.306), are acceptable in the domestic mail as follows:
 - (1) *Carbonated Beverages.* These items are not regulated as hazardous materials and are acceptable without restriction. Carbonated beverages must be properly packaged under DMM 601.1-7.
 - (2) *Biological Products or Medical Preparations.* A product or preparation in a nonrefillable metal primary receptacle charged with a nonflammable solution (containing a biological product or a medical preparation that heat could deteriorate) may be accepted for domestic surface mail only, provided the conditions in Packaging Instruction 2F in Appendix [C](#) are followed.
 - (3) *Foodstuffs and Soaps.* These materials are mailable provided the conditions in Packaging Instruction 2D in Appendix [C](#) are met.
 - (4) *Electronic Tubes.* These materials are mailable without restriction if the volume is 30 cubic inches or less and the tube is charged with gas to a pressure of 35 psig or less. Such tubes must be packed in a strong outer container and meet the general packaging requirements in DMM 601.1-7.
 - (5) *Audible Fire Alarm Systems.* An audible fire alarm system powered by a compressed gas is acceptable in the domestic mail via surface transportation provided the conditions in Packaging Instruction 2E in Appendix [C](#) are followed.

342.3 Packaging

Mailable compressed gases must be packaged to protect valves and fittings and to ensure integrity of the primary receptacle during transport. Containers must use recessed valves, screw thread caps, tap closures, or other means to prevent accidental discharge.

The following conditions apply:

- a. *Nonmetal Containers.* A mailable gas is acceptable in an other-than-metal primary receptacle if the water capacity is 4 fluid ounces (7.22 cubic inches) or less. Packaging Instruction 2A or 2B, as applicable, must be followed.

- b. *Metal Containers.* Mailable nonflammable and flammable compressed gases are acceptable in metal primary receptacles that have a water capacity up to 33.8 fluid ounces (1 liter or 61.0 cubic inches). The liquid content of the material and the gas must not completely fill the primary receptacle at 130° F (55° C). Additionally, the following apply:
 - (1) A DOT 2P container must be used if the internal pressure is from 140 psig to 160 psig at 130° F (55° C).
 - (2) A DOT 2Q container must be used if the pressure is from 161 psig to 180 psig at 130° F (55° C).
 - (3) Packaging Instruction 2A or 2B, as applicable, must be followed.
- c. A container with an internal pressure over 180 psig at 130° F (55° C) is prohibited from mailing.
- d. *Flammable Gases.* A mailable flammable compressed gas is restricted to 4 fluid ounces in a nonmetal primary receptacle or 33.8 fluid ounces (1 liter) in a metal primary receptacle per mailpiece Packaging Instruction 2A must be followed.
- e. *Nonflammable Gases.* A mailable nonflammable gas is permitted in individual 4 fluid ounce nonmetal primary receptacles or 33.8 fluid ounce (1 liter) metal primary receptacles. Multiple primary receptacles may be securely packed within a single, strong outer packaging. Each mailpiece must not exceed a total weight of 25 pounds. Packaging Instruction 2B must be followed.

342.4 **Marking and Documentation**

All labels and text markings must be placed on the address side of the mailpiece unless specified in [221.1](#) and [325.1](#). Parcels containing mailable gases must be marked as follows:

- a. For air transportation, parcels must bear the DOT square-on-point marking. The top and bottom portions of the square-on-point and the border forming the square-on-point must be black, and the center must be white or of a suitable contrasting background. The symbol “Y” must be black, located in the center of the square-on-point, and clearly visible. Mailpieces must also be marked with the proper shipping name “Consumer Commodity” and identification number “ID8000.” Each mailpiece must also bear an approved DOT Class 9 hazardous material warning label (see [Exhibit 325.3b](#)). A properly completed shipper’s declaration for dangerous goods prepared in triplicate must be affixed to the outside of the mailpiece.
- b. For surface transportation, parcels must be plainly and durably marked on the address side with an approved DOT Limited Quantity marking (see [325.4](#)). Surface shipments bearing the Limited Quantity ground marking are not required to include the proper shipping name and identification number. A shipper’s declaration for dangerous goods is not required for mailable gases sent via surface transportation.

- c. Markings must be durable, legible, and readily visible, and must be applied on at least one side or one end of the outer packaging. The border forming the square-on-point must be at least 2 mm in width, and the minimum dimension of each side must be 100 mm, unless the package size requires a reduced size marking of no less than 50 mm on each side.

342.5 Mailability Rulings

In addition to the information required in [215.2](#) and [324](#), requests for mailability rulings on gases and products containing compressed gases need to include the following information:

- a. Documentation indicating whether or not the contents are a flammable mixture when dispersed.
- b. The internal pressure within the primary receptacle at 70° F (21° C) and 130° F (55° C).
- c. Documentation as to whether or not the liquid contents completely fill the container at 70° F (21° C) and 130° F (55° C).
- d. The bursting strength of the primary receptacle.
- e. The capacity of the primary receptacle and the number of primary receptacles proposed to be packed within a single mailpiece.
- f. The design methods intended to prevent accidental discharge of the contents.

343 Flammable and Combustible Liquids (Hazard Class 3)

343.1 Definition

The terms used in the standards that apply to Hazard Class 3 are defined as follows:

- a. *Flammable Liquid* means a liquid that has a flashpoint of not more than 140° F (60° C), or any material in a liquid phase that has a flashpoint at or above 100° F (38° C).
- b. *Combustible Liquid* means any liquid that does not meet the definition of any other hazard class and has a flashpoint above 140° F (60° C) and below 200° F (93° C). A flammable liquid with a flashpoint at or above 100° F (38° C) that does not meet the definition of any other hazard class may be reclassified as a combustible liquid per 49 CFR 173.120(b).

Note: A liquid with a flashpoint above 200° F (93° C) is not regulated as a hazardous material and may be mailed subject to the general packaging requirements in DMM 601.1-7, provided it possesses no characteristics of another hazard class.

343.2 Mailability and Packaging

343.21 Requirements for Flammable Liquids

The following conditions apply:

- a. *International Mail.* Flammable liquid is prohibited.
- b. *Domestic Mail via Air Transportation.* Flammable liquid is prohibited.
- c. *Domestic Mail via Surface Transportation.* Flammable liquid with a flashpoint of 20° F (–7° C) or below is prohibited. Other flammable liquids are permitted if the material qualifies as a Limited Quantity ground material and meets the criteria in [Exhibit 343.21](#). A mailable flammable liquid must be prepared according to Packaging Instruction 3A in Appendix [C](#), as applicable.

Exhibit 343.21

Flammable Liquids

| Flashpoint | Mailability |
|---|--|
| 20° F (–7° C) or below | Not acceptable for mailing. |
| Above 20° F (–7° C) but not more than 73° F (23° C) | Acceptable (with restrictions) for domestic mail via surface transportation only. Follow requirements for Packaging Instruction 3A in Appendix C , as applicable. |
| Above 73° F (23° C) but less than 100° F (38° C) | Acceptable (with restrictions) for domestic mail via surface transportation only. Follow requirements for Packaging Instruction 3A in Appendix C , as applicable. |
| 100° F (38° C) and up to 140° F (60° C) | Acceptable (with restrictions) for domestic mail via surface transportation only. Follow requirements for Packaging Instruction 3A or 3B in Appendix C , as applicable. Note: If the flashpoint is between 100° F (38° C) and 140° F (60° C), the liquid may be eligible to be reclassified as a combustible liquid. |
| Over 140° F (60° C) | See combustible liquids in 343.22 . Follow requirements for Packaging Instruction 3B in Appendix C . |

343.22 Requirements for Combustible Liquids

The following conditions apply:

- a. *International Mail.* Combustible liquid is prohibited.
- b. *Domestic Mail via Air Transportation.* Combustible liquid is permitted if the material can qualify as an ID8000 material (see [335](#)) and meets the criteria in [Exhibit 343.22](#). Packaging Instruction 3B in Appendix [C](#) must be followed, as applicable.
- c. *Domestic Mail via Surface Transportation.* Combustible liquids are permitted if the material qualifies as a Limited Quantity and a consumer commodity material, and meets the criteria in [Exhibit 343.22](#). Packaging Instruction 3B in Appendix [C](#) must be followed, as applicable.

Exhibit 343.22

Combustible Liquids

| Flashpoint | Mailability |
|---|--|
| Below 100° F (38° C) | Not a combustible liquid. See flammable liquids in 343.21 . |
| 100° F (38° C) but not more than 140° F (60° C) | A flammable liquid that may be eligible to be reclassified as a combustible liquid under 49 CFR 173.120(b). See 343.1 . Acceptable (with restrictions) in domestic mail via surface transportation only. Follow requirements for Packaging Instruction 3B in Appendix C , as applicable. |
| Above 140° F (60° C) but not more than 200° F (93° C) | Acceptable (with restrictions) for domestic mail via air transportation or surface transportation. Follow requirements for Packaging Instruction 3B in Appendix C , as applicable. |
| Above 200° F (93° C) | The material is not regulated as a hazardous material. Such nonregulated materials must be properly and securely packaged to prevent leakage under the general packaging requirements in DMM 601.3.4. |

343.23 **Nonmailable Flammable and Combustible Liquids**

When flammable liquids and combustible liquids that are nonmailable under [343.21](#) or [343.22](#) are found in the mailstream, the procedures in POM 139.117 must be followed if the materials present an immediate threat to persons or property.

The following materials are nonmailable:

- All flammable liquids having a flashpoint of 20° F (-7° C) or below are prohibited from mailing.
- Gasoline* (UN1203) is a flammable liquid that normally has a flashpoint of -50° F. Gasoline is nonmailable under any circumstances.
- Acetone (UN1090) normally has a flashpoint of 0° F, Benzene (UN1114) normally has a flashpoint of 12° F, and Hexane(s) (UN1208) normally have flashpoints in the vicinity of -15° F. All are nonmailable unless diluted with less flammable or nonflammable materials sufficient to raise the flashpoint to 20° F or higher.

343.24 **Mailable Flammable and Combustible Liquids**

The following are mailable:

- Paint* or a related item (UN1263) classified as a flammable or combustible liquid is generally acceptable for mailing provided it can qualify as a Limited Quantity surface material and is sent within the quantity limitations and packaging requirements stated in [343.21](#) or [343.22](#), as applicable. Also see [343.26](#). Mailpieces must be prepared following Packaging Instruction 3A or 3B in Appendix [C](#), as applicable.
- Latex Paint* or a similar water-based paint product that is not flammable or combustible is not regulated as a hazardous material, and therefore is not restricted. Also see [343.26](#). Mailpieces must be properly packaged under DMM 601.1-7.

- c. *Canned Heat (Sterno)* is a flammable liquid that normally has a flashpoint from 40° F (4° C) to 80° F (27° C). It is permitted if it can qualify as a Limited Quantity surface material and is sent within the quantity limitations and packaging requirements stated in [343.21](#). Mailpieces must be prepared following Packaging Instruction 3A in Appendix [C](#).
- d. *Lighter Fluid* is a flammable liquid that normally has a flashpoint between 20° F (-7° C) and 55° F (13° C). It is permitted only in domestic mail via surface transportation provided the fluid can qualify as a Limited Quantity surface material and is sent within the quantity limitations and packaging requirements stated in [343.21](#). Mailpieces must be prepared following Packaging Instruction 3A in Appendix [C](#).
- e. *Diesel Fuel (NA1993)* is a combustible liquid that normally has a flashpoint between 110° F (43° C) and 190° F (88° C). It is acceptable for mailing provided the fluid can qualify as a Limited Quantity surface material, and the liquid is sent within the conditions stated in [343.22](#). Mailpieces must be prepared following Packaging Instruction 3B in Appendix [C](#).
- f. *Fuel Oil (NA1993)* is a flammable liquid that normally has a flashpoint below 100° F (38° C). The specific flashpoint must be accurately identified by the mailer before a mailability determination can be made. Fuel oil is mailable if it can qualify as a Limited Quantity surface material and is sent within the quantity limitations and packaging requirements stated in [343.21](#) or [343.22](#), as applicable. Mailpieces must be prepared following Packaging Instruction 3A or 3B in Appendix [C](#).
- g. *Adhesives and Cements (UN1133)* that are classified as flammable or combustible liquids are mailable only if they can qualify as Limited Quantity surface materials and the applicable conditions in [343.21](#) or [343.22](#) are met. Mailpieces must be prepared following Packaging Instruction 3A or 3B in Appendix [C](#), as applicable.

Note: Some adhesives and cements are extremely toxic and may be classified as Division 6.1 toxic substances. Division 6.1 materials are mailable only as permitted in [346.21](#).

- h. *Cleaning Agents and Solvents* that are classified as flammable liquids are mailable only if they can qualify as Limited Quantity surface materials, and the applicable conditions in [343.21](#) can be met. Mailpieces must be prepared following Packaging Instruction 3A in Appendix [C](#).

Note: Some cleaning agents and solvents are extremely toxic or corrosive and may be classified as either a Division 6.1 toxic substance or a Class 8 corrosive. Division 6.1 toxic materials and Class 8 corrosives are permitted only within the conditions of [343.21](#) and [348.2](#) respectively.

- i. *Model Fuel (for glow-plug engines)* is a flammable liquid that has a flashpoint ranging from 65° F to 75° F. It is mailable only if it can qualify as Limited Quantity surface material, and is sent within the quantity

limitations and packaging requirements stated in [343.21](#). Mailpieces must be prepared following Packaging Instruction 3A in Appendix [C](#).

- j. *Waxes and Polishes* have a wide range of flashpoints. The flashpoint and toxicity must be accurately identified by the mailer before mailability can be determined. Any waxes or polishes that are flammable or combustible liquids are permitted to be mailed, provided they can qualify as a Limited Quantity surface material and the applicable conditions in [343.21](#) and [343.22](#) are met. Mailpieces must be prepared following Packaging Instruction 3A or 3B in Appendix [C](#), as applicable.

343.25 **Lighters**

A lighter equipped with an ignition element and containing liquid fuel is classified as a Class 3 flammable liquid. A lighter containing a flammable gas is classed as a Division 2.1 flammable gas. A lighter that contains either flammable liquid or flammable gas is permitted only in the domestic mail via surface transportation with prior written approval and within these conditions:

- a. The design of the lighter is certified by a lighter testing agency authorized by the DOT Associate Administrator for Hazardous Materials Safety, per 49 CFR 173.21(i) and 173.308, and an Approval Number (LAA****) is issued.
- b. The prospective mailer of the lighter submits to the PCSC manager a written request for authorization to mail the lighter, accompanied by a legible photocopy of the official DOT notice conveying the approval described in [343.25a](#), along with a specimen of the actual lighter, the packaging materials in which each lighter is to be mailed, and the number of mailpieces and mailing location; the mailer receives from the PCSC manager a letter approving the requested authorization for mailing.
- c. The packaging must be designed to protect the lighter's sparking mechanism from accidental ignition caused by friction or external pressure during transport. Packaging Instruction 3C in Appendix [C](#) must be followed.
- d. When presented for mailing, the address side of the mailpiece must prominently display the proper shipping name "Lighter(s)" or "Lighter Refill(s)" followed by the Approval Number (LAA****) and the marking "Surface Only" or "Surface Mail Only," and all preparation and packaging requirements in the PCSC manager's approval letter must be met. A legible photocopy of the PCSC manager's approval must accompany the mailing at the time of deposit.
- e. A shipper's declaration for dangerous goods is not required.

343.26 Paints, Paint-Related Materials, and Inks

The following definitions apply:

- a. *Paint* (UN1263) is the proper shipping name and description for paint, lacquer, enamel, stain, shellac, varnish, liquid aluminum, liquid bronze, liquid gold, liquid wood filler, and liquid lacquer base. *Paint-related material* (UN1263) is the proper shipping name and description for a paint-thinning, paint-drying, paint-reducing, or paint-removing compound. See [343.24a](#) and [343.24b](#) for mailability.
- b. *Inks* are defined as colored liquids used for writing, drawing, etc., and liquids and pastes used in printing. Printing inks usually are mixtures of finely divided pigments, such as carbon black suspended in a drying oil. Inks classified as combustible or flammable liquids are generally mailable, provided they qualify as Limited Quantity surface material, and meet the applicable requirements in [343.21](#) or [343.22](#). Mailpieces must be prepared using Packaging Instruction 3A or 3B in Appendix C, as applicable. The following conditions apply:
 - (1) Regardless of the size or type of container, the primary receptacle(s) containing inks must be cushioned with sufficient absorbent material to take up all liquid contents in case of leakage.
 - (2) The primary receptacle(s) and the absorbent cushioning material must be packed within a sealed, leakproof outer packaging.
 - (3) Inks that are flammable or combustible liquids must meet the quantity restrictions, packaging requirements, and air or surface transportation conditions that apply under [343.2](#).

Note: Inks that do not possess any hazardous characteristics are not regulated as hazardous materials and are mailable if properly prepared under the standards for packaging liquids in [451.3](#) and DMM 601.3.4.

343.27 Authorization to Mail Ethanol-Based Flammable Liquids or Solids

Flammable liquids or solids that contain ethyl alcohol are eligible to be mailed via domestic air transportation only with prior written authorization.

Mailers must submit a letter of request to the manager, Product Classification (see 214 for address). The request must include a list of each specific product to be mailed under the authorization, an MSDS for each product, the office of mailing, and expected frequency and quantity of mailings.

Approvals are initially provided for the duration of one year. Subsequent approvals are performance-based and will be extended in one- to three-year increments.

If approved, the mailer must:

- a. Present a copy of their authorization letter from the manager, Product Classification (to be kept on file at the office of mailing) at the time of their first mailing at any given Postal Service facility. Mailings not supported by an authorization letter will be refused.

- b. For content containing *not more than 70%* ethyl alcohol by volume, tender only parcels weighing 25 pounds or less. Each *non-glass* primary receptacle must not exceed 16 ounces of flammable liquid or 1 pound of solids. Each *glass* primary receptacle must not exceed 8 ounces of flammable liquid or 1/2 pound of solids. Total volume of flammable material per mailpiece must not exceed 96 ounces for flammable liquids or 16 pounds for flammable solids.
- c. For content containing *more than 70%* ethyl alcohol by volume, tender only parcels weighing 16 pounds or less. Each primary package receptacle must not exceed 8 ounces of flammable liquid or 1/2 pound of solids. Total volume of flammable material per mailpiece must not exceed 48 ounces for flammable liquids or 8 pounds for flammable solids.
- d. Enter parcels using Priority Mail Express, Priority Mail, First-Class Mail, or First-Class Package Service.
- e. Label each parcel on the address side with the mailer's company name and return address.
- f. Label each parcel on the address side with the marking "Contains Air-Eligible Ethyl Alcohol — Authorization Number #," using at least 14-point type.
- g. Ensure that the addressee of each parcel is notified that the addressee is not authorized to re-mail the contents of the parcel via air transportation. The mailer must include the following written notice:
"Flammable liquids or solids contained in these packages may be mailed only by consumers (the addressee) via surface transportation in accordance with USPS Publication 52, section 343. Full responsibility rests with the mailer to comply with all postal and nonpostal statutes and regulations regarding mail. Information regarding postal statutes, regulations, and mailing requirements is available from your local Postmaster or district manager, Business Mail Entry, and at the Postal Service's mailing standards website, Postal Explorer, at pe.usps.com."
- h. Comply with the warning and labeling requirements set forth in 21 CFR 700, 701.3, and 740.1 when mailing each parcel.
- i. Comply with all quantity, packaging, and marking requirements in Packaging Instruction 3D in Appendix C.

343.3 **Marking and Documentation**

All labels and text markings must be placed on the address side of the mailpiece unless specified in [221.1](#) and [325.1](#). Parcels containing mailable flammable or combustible liquids must be marked as follows:

- a. For air transportation, parcels containing mailable Class 3 materials must bear the DOT square-on-point marking. The top and bottom portions of the square-on-point and the border forming the square-on-point must be black, and the center must be white or of a suitable contrasting background. The symbol "Y" must be black, located in the center of the square-on-point, and clearly visible. Mailpieces must also be marked with the proper shipping name "Consumer Commodity" and identification number "ID8000." Each mailpiece must also bear an

approved DOT Class 9 hazardous material warning label (see [Exhibit 325.3b](#)). A properly completed shipper's declaration for dangerous goods prepared in triplicate must be affixed to the outside of the mailpiece.

- b. For surface transportation, parcels containing mailable Class 3 materials must be plainly and durably marked on the address side with an approved DOT Limited Quantity marking (see [Exhibit 325.4](#)). Surface shipments bearing Limited Quantity ground markings are not required to include the proper shipping name and identification number. A shipper's declaration for dangerous goods is not required for mailable Class 3 materials sent via surface transportation.
- c. Markings must be durable, legible, and readily visible, and must be applied on at least one side or one end of the outer packaging. The border forming the square-on-point must be at least 2 mm in width, and the minimum dimension of each side must be 100 mm, unless the package size requires a reduced size marking of no less than 50 mm on each side.
- d. Lighters containing flammable liquids or gases must be marked as specified in [343.25](#).
- e. Ethanol-based flammable liquids or solids must be marked as specified in [343.27](#) and Appendix C, Packaging Instruction 3D.

344 Flammable Solids (Hazard Class 4)

344.1 Definition

Hazard Class 4 consists of three divisions:

- a. *Division 4.1, Flammable Solids.* Any solid material other than one classed as an explosive that, under conditions normally incident to transportation, is likely to cause fires through friction or retained heat from manufacturing or processing, or that can be ignited readily and, when ignited, burns so vigorously and persistently as to create a serious transportation hazard.
- b. *Division 4.2, Spontaneously Combustible.* A liquid or solid pyrophoric material that even in small amounts and without an external ignition source can ignite within 5 minutes after coming in contact with air, or a self-heating material that when in contact with air and without an energy supply is liable to self heat.
- c. *Division 4.3, Dangerous When Wet.* A material that, by contact with water, is likely to become spontaneously flammable or to give off flammable or toxic gas at a rate greater than 1 liter per kilogram of the material per hour.

Examples of flammable solids include certain metallic hydrides, metallic sodium and potassium, oily fabrics, processed metals, matches, and nitrocellulose products.

344.2 Mailability

The following conditions apply:

- a. *International Mail*. All flammable solids are prohibited.
- b. *Domestic Mail via Air Transportation*. All flammable solids are prohibited.
- c. *Domestic Mail via Surface Transportation*. Flammable solids that can qualify as a Limited Quantity surface material are permitted.

344.21 Nonmailable Flammable Solids

When flammable solids that are nonmailable under [344](#) are found in the mailstream, the procedures in POM 139.117 must be followed if the materials present an immediate threat to persons or property.

Strike-anywhere matches are nonmailable in international mail and domestic mail. Safety matches (book, card, or strike-on-box) are nonmailable in international and domestic mail via air transportation.

344.22 Mailable Flammable Solids

The following are mailable:

- a. Flammable solids that qualify as Limited Quantity surface materials are permitted in the domestic mail via surface transportation.
- b. Safety matches (book, card, or strike-on-box) are permitted only in domestic mail via surface transportation.

344.3 Packaging, Marking, and Documentation

All labels and text markings must be placed on the address side of the mailpiece unless specified in [221.1](#) and [325.1](#). The following conditions apply:

- a. *Mailable Flammable Solids*. The conditions in Packaging Instruction 4A in Appendix C must be followed. Mailpieces containing mailable Class 4 materials must be plainly and durably marked on the address side with an approved DOT Limited Quantity ground marking (see [325.4](#)). Shipments bearing the Limited Quantity surface marking are not required to be marked with the proper shipping name and identification number. A shipper's declaration for dangerous goods is not required for mailable Class 4 materials sent via surface transportation.
- b. *Safety Matches*. The conditions in Packaging Instruction 4B in Appendix [C](#) must be followed. Mailpieces must be plainly and durable marked on the address side with "Surface Only" or "Surface Mail Only" and, as applicable, "Book Matches," "Strike-on-Card Matches," or "Card Matches." A shipper's declaration for dangerous goods is not required.

345 **Oxidizing Substances, Organic Peroxides (Hazard Class 5)**

345.1 **Definition**

Hazard Class 5 consists of two divisions:

- a. *Division 5.1, Oxidizing Substances.* A material that may, generally by yielding oxygen, cause or enhance the combustion of other materials.
- b. *Division 5.2, Organic Peroxides.* Any organic compound that contains oxygen in the bivalent structure and that may be considered a derivative of hydrogen peroxide, where one or more of the hydrogen atoms have been replaced by organic radicals.

Examples of Class 5 materials (not all of which are mailable) include ferric nitrate, hydrogen peroxide, lead perchlorate, lithium nitrate, organic peroxide solids or liquids, and some swimming-pool chemicals.

345.2 **Mailability**

The following conditions apply:

- a. *International Mail.* All oxidizing substances and organic peroxides are prohibited.
- b. *Domestic Mail via Air or Surface Transportation.* An oxidizing substance or an organic peroxide that can qualify as Limited Quantity air or Limited Quantity surface is permitted.

345.21 **Nonmailable Class 5 Materials**

When nonmailable Class 5 materials are found in the mailstream, the procedures in POM 139.117 must be followed if the materials present an immediate threat to persons or property. The procedures in POM 139.118 are followed when there is no immediate threat to persons or property.

The following Class 5 materials are nonmailable:

- a. *Division 5.1, Oxidizing Substances.*
 - (1) Chlorine dioxide hydrate, frozen.
 - (2) Hydrogen peroxide solution (more than 20 percent).
 - (3) Perchloric acid.
 - (4) Potassium peroxide.
 - (5) Sodium chlorite.
 - (6) Tetranitromethane.
 - (7) Zinc ammonium nitrate.
- b. *Division 5.2, Organic Peroxides.* Organic peroxides are nonmailable unless they can qualify as Limited Quantity air or Limited Quantity surface.

345.22 **Mailable Class 5 Materials**

The following Class 5 materials are mailable:

- a. A division 5.1 or 5.2 material that can be reclassified as a Limited Quantity air or Limited Quantity surface are mailable within the requirements in [345.2b](#).

- b. *Hydrogen Peroxide*. There are no restrictions on Division 5.1 hydrogen peroxide solutions with 8 percent or less hydrogen peroxide content. Solutions of hydrogen peroxide more than 8 percent but no more than 20 percent are permitted if they can qualify as Limited Quantity air or Limited Quantity surface.

345.3 **Packaging, Marking, and Documentation**

All labels and text markings must be placed on the address side of the mailpiece unless specified in [221.1](#) and [325.1](#). Parcels containing mailable oxidizing substances or organic peroxides must be marked as follows:

- a. All mailable Division 5.1 and 5.2 materials must be prepared following the conditions for Packaging Instruction 5A in Appendix [C](#).
- b. For air transportation, parcels containing mailable Division 5.1 or 5.2 materials must bear the DOT square-on-point marking. The top and bottom portions of the square-on-point and the border forming the square-on-point must be black, and the center must be white or of a suitable contrasting background. The symbol “Y” must be black, located in the center of the square-on-point, and clearly visible. Mailpieces must also be marked with the proper shipping name and identification number. Each mailpiece must also bear an approved DOT Class 5.1 or 5.2 hazardous material warning label (see [Exhibit 325.3b](#)). A properly completed shipper’s declaration for dangerous goods prepared in triplicate must be affixed to the outside of the mailpiece.
- c. For surface transportation, parcels containing mailable Division 5.1 or 5.2 materials must be plainly and durably marked on the address side with an approved DOT Limited Quantity surface marking (see [325.4](#)). Shipments bearing the Limited Quantity surface marking are not required to include the shipping name and identification number. A shipper’s declaration for dangerous goods is not required for mailable Division 5.1 or 5.2 materials sent via surface transportation.
- d. When DOT square-on-point markings are used, markings must be durable, legible, and readily visible, and must be applied on at least one side or one end of the outer packaging. The border forming the square-on-point must be at least 2 mm in width, and the minimum dimension of each side must be 100 mm, unless the package size requires a reduced size marking of no less than 50 mm on each side.

346 **Toxic Substances and Infectious Substances (Hazard Class 6)**

346.1 **Definitions**

Hazard Class 6 consists of two divisions:

- a. Division 6.1 includes toxic substances, poisons, and irritating material. Examples of Division 6.1 materials (not all of which are mailable) include bromobenzyl cyanide, methyl bromide, motor fuel anti-knock mixtures, and tear gas.

- b. Division 6.2 includes infectious substances. Examples of Division 6.2 materials include infectious substances, biological products, regulated medical waste, sharps medical waste, used health care products, and forensic materials.

346.11 **Division 6.1**

The following terms are used in the standards for Division 6.1 materials:

- a. *Toxic Substance* is a poisonous material, other than a gas, that is known to be so toxic to humans as to cause death, injury, or harm to human health if swallowed, inhaled, or brought into contact with skin.
- b. *Oral Toxicity* refers to a liquid or solid with a lethal dose (LD₅₀) for acute oral toxicity of not more than 300 mg/kg that, when administered by mouth, is likely to cause death within 14 days in half of the test animals.
- c. *Dermal Toxicity* refers to a material with an LD₅₀ for acute dermal toxicity of not more than 1,000 mg/kg that, when administered by continuous contact with bare skin, is likely to cause death within 14 days in half of the test animals.
- d. *Inhalation Toxicity* applies to a dust or mist with a lethal concentration (LC₅₀) for acute inhalation toxicity of not more than 4 mg/L, or a saturated vapor concentration in air at 68° F (20° C) greater than or equal to more than one-fifth of the LC₅₀ for acute toxicity on inhalation of vapors and with an LC₅₀ for acute inhalation toxicity of vapors of not more than 5,000 ml/m³ that, when administered by continuous inhalation for 1 hour, is likely to cause death within 14 days in half of the test animals.
- e. *Irritating Material* is any liquid or solid substance (such as tear gas) that gives off intense fumes and causes extreme but reversible localized irritant effects on the eyes, nose, and throat, temporarily impairing a person's ability to function.

346.12 **Division 6.2, Infectious Substances**

Division 6.2 materials include infectious substances, biological products, regulated medical waste, sharps medical waste, used health care products, and forensic materials. Division 6.2 materials are not permitted in international mail or domestic mail, except when they are intended for medical or veterinary use, research, or laboratory certification related to the public health; and only when such materials are properly prepared for mailing to withstand shocks, pressure changes, and other conditions related to ordinary handling in transit. Unless otherwise noted, all mailable Division 6.2 materials must meet the mail preparation requirements for air transportation. The following terms are used in the standards for Division 6.2 materials:

- a. *Infectious substance* means a material known or reasonably expected to contain a pathogen. A pathogen is a microorganism that can cause disease in humans or animals. Examples of pathogens include bacteria, viruses, fungi, and other infectious agents. An infectious substance must be assigned to one of the following two packaging categories:
 - (1) *Category A*: An infectious substance transported in a form capable of causing permanent disability or life-threatening or fatal disease in otherwise healthy humans or animals when

exposure occurs. Category A infectious substances are nonmailable. A Category A infectious substance is assigned the identification number UN2814 or UN2900, based on the known medical history or symptoms of the source patient or animal, endemic local conditions, or professional judgment concerning the individual circumstances of the source human or animal.

- (2) *Category B*: An infectious substance that does not meet the criteria for inclusion in Category A. A mailpiece known or suspected to contain a Category B infectious substance must bear the proper shipping name “Biological Substance, Category B” and must be assigned to and marked with identification number UN3373 (as shown in [Exhibit 346.12a2](#)). Regulated medical waste and sharps medical waste must be assigned to and marked with identification number UN3291. The proper shipping name, identification number, and warning label, when applicable, must be marked on the address side of the package unless specified in [221.1](#) and [325.1](#).

Exhibit 346.12a2

Mailpiece Symbol and Marking for Mailpieces Containing Biological Substance, Category B Substances



- b. *Biological product* means a virus, therapeutic serum, toxin, antitoxin, vaccine, blood, blood component or derivative, allergenic product, or analogous product or arsphenamine or derivative of arsphenamine (or any other trivalent arsenic compound) intended to prevent, treat, or cure a disease or condition of humans or animals. A biological product includes a material subject to regulation under 42 U.S.C. 262 or 21 U.S.C. 151–159. Unless otherwise excepted, mark these mailpieces with identification number UN3373 (as shown in [Exhibit 346.12a2](#)) when they contain a biological product known or reasonably expected to contain a pathogen that meets the definition of a Category B infectious substance.
- c. *Cultures* are infectious substances that result from a process by which pathogens are intentionally propagated. This definition does not include a human or animal patient specimen as defined in [346.12e](#).
- d. *Exempt human or animal specimen* means a human or animal sample (including, but not limited to, secret, excreta, blood and its components, tissue and tissue fluids, and body parts) transported for routine testing not related to the diagnosis of an infectious disease.

Typically, exempt human specimens are specimens for which there is a low probability that the sample is infectious, such as specimens for drug or alcohol testing; cholesterol testing; blood glucose level testing; prostate-specific antigens (PSA) testing; testing to monitor heart, kidney, or liver function; pregnancy testing; and testing for diagnosis of noninfectious diseases such as cancer biopsies. Exempt human or animal specimens are not subject to regulation as hazardous materials but must be packaged according to [346.326](#).

- e. *Patient specimen* means material that is collected directly from humans or animals and transported for purposes such as diagnosis and research. Patient specimens include excreta, secretions, blood and its components, tissue and tissue swabs, body parts, and specimens in transport media (such as transwabs, culture media, and blood culture bottles).
- f. *Regulated medical waste*, for USPS purposes, means a soft waste material (other than a sharp) derived from the medical treatment, diagnosis, immunization, or biomedical research of a human or animal. Soft medical waste includes items such as used rubber gloves, swabs, gauze, tongue depressors, and other similar material. Mark these mailpieces with identification number UN3291.
- g. *Sharps medical waste*, for USPS purposes, means a medical waste object that is capable of cutting or penetrating skin or packaging material and that is contaminated with a pathogen or may become contaminated with a pathogen derived from the medical treatment, diagnosis, immunization, or biomedical research of a human or animal. Sharps include used medical waste such as needles, syringes, scalpels, broken glass, culture slides, culture dishes, broken capillary tubes, broken rigid plastic, and exposed ends of dental wires. Mark these mailpieces with identification number UN3291.
- h. *Toxin* means a Division 6.1 material from a plant, animal, or bacterial source. A toxin containing an infectious substance or a toxin contained in an infectious substance must be classed as Division 6.2, described as an infectious substance, and assigned to UN2814, UN2900, or UN3373, as appropriate. A toxin known or suspected to contain a Category A infectious substance is nonmailable. A toxin known or suspected to contain a Category B infectious substance must be marked UN3373 and packaged under [346.321](#). Toxins from plant, animal, or bacterial sources that do not contain an infectious substance and are not contained in an infectious substance may be considered for classification as Division 6.1 toxic substances under [346](#).
- i. *Used health care product* means a medical, diagnostic, or research device or piece of equipment, or a personal care product used by consumers, medical professionals, or pharmaceutical providers, that does not meet the definition of a diagnostic specimen, biological product, regulated medical waste, or sharps waste, is contaminated with potentially infectious body fluids or materials, and is not decontaminated or disinfected to remove or mitigate the infectious hazard prior to transport.

346.2 Mailability**346.21 General****346.211 Division 6.1, Toxic Substances**

The following conditions apply:

- a. *International Mail.* Division 6.1 toxic substances or poisons and irritating materials are prohibited.
- b. *Domestic Mail via Air or Surface Transportation.* A Division 6.1 toxic substance or poison that can qualify as a Limited Quantity/consumer commodity material is permitted when packaged under the applicable requirements in Appendix C (Packaging Instruction 6A). Certain other poisonous materials are permitted to be mailed only between authorized parties under specific conditions as specified in [346.231b](#).

346.212 Division 6.2, Infectious Substances

- a. *International Mail.* Category A infectious substances are nonmailable. A material that is classified as a Category B infectious substance and that meets the definition in [346.12a2](#) is permitted in international mail only when sent by First-Class Package International Service or the Priority Mail International Small Flat Rate Priced Boxes using Registered Mail service; when intended for medical or veterinary use, research, or laboratory certification related to the public health; and when materials are properly prepared for mailing. The mailer must receive written approval from the USPS manager, Product Classification (see [214](#) for address). See Chapter 6 and IMM 135 for specific requirements.
- b. *Domestic Mail.* Infectious substances are permitted only when they are intended for medical or veterinary use, research, or laboratory certification related to public health, and when properly prepared for mailing to withstand shocks, pressure changes, and other conditions incident to ordinary handling in transit. The following substances are mailable subject to the corresponding packaging requirements:
 - (1) Category B infectious substance via First-Class Mail, Priority Mail, or Priority Mail Express service.
 - (2) Sharps and other mailable regulated medical waste via First-Class Mail or Priority Mail service using merchandise return service.
 - (3) Used health care products via First-Class Mail, Priority Mail, or Priority Mail Express service.
 - (4) Forensic materials via First-Class Mail, Priority Mail, or Priority Mail Express service.
 - (5) Nonregulated materials via First-Class Mail, Priority Mail, Priority Mail Express, or Package Services.
 - (6) Exempt human or animal specimens via First-Class Mail, Priority Mail, Priority Mail Express, or Package Services.

346.22 Nonmailable Class 6 Materials

When hazardous materials that are nonmailable under [346.2](#) are found in the mailstream, the procedures in POM 139.117 must be followed if the materials present an immediate threat to persons or property. The procedures in POM 139.118 are followed when there is no immediate threat to persons or property.

346.221 Division 6.1, Toxic Substances

The following Division 6.1 materials are nonmailable:

- a. *Toxic Substances*. Any toxic material having an LD₅₀ for oral toxicity of 50 mg/kg or less is nonmailable, except when sent between authorized parties under the conditions permitted in [346.231b](#). Examples of nonmailable toxic materials include, but are not limited to, the following:

- (1) Aniline oil (UN1547).
- (2) Bromoacetone (UN1569).
- (3) 3-Chloro-4-methylphenyl isocyanate (UN2236).
- (4) Chloropicrin (UN1580).
- (5) Cyanogen bromide (UN1889).
- (6) Hexaethyl tetraphosphate, liquid or solid (UN1611).
- (7) Hydrocyanic acid aqueous solutions (UN1613).
- (8) Methyl bromide (UN1062).
- (9) Methyl parathion, liquid (NA3018).
- (10) Motor fuel antiknock mixtures (UN1649).
- (11) Organic phosphate compound (NA1955).
- (12) Parathion (NA1967).
- (13) Phenylcarbylamine chloride (UN1672).
- (14) Tetraethyl dithiopyrophosphate (UN1704).
- (15) Tetraethyl lead, liquid (NA1649).
- (16) Tetraethyl pyrophosphate, liquid (NA3018).
- (17) Thiophosgene (UN2474).

- b. *Irritating Materials*. All irritating materials are nonmailable. Examples include the following:

- (1) Bromobenzyl cyanide (UN1694).
- (2) Chloroacetophenone (UN1697).
- (3) Diphenylamine chloroarsine (UN1698).
- (4) Diphenylchloroarsine (UN1699).
- (5) Tear gas (UN1700, NA1693, and UN1693), except for those containing oleoresin capsicum.

346.222 Division 6.2, Infectious Substances

The following Division 6.2 materials are nonmailable:

- a. Blood collected for the purpose of blood transfusion known or suspected to contain a Category A infectious substance.

- b. A biological product, culture, stock, or other biological specimen known or suspected to contain a Category A infectious substance. Mailpieces that exceed 4 liters (1 gallon) for liquids or 4 kg. (8.8 pounds) for solids are nonmailable.
- c. A toxin known or suspected to contain a Category A infectious substance.
- d. Sharps medical waste and regulated medical waste that contain a Category A infectious substance.
- e. Used healthcare products that contain a Category A infectious substance.

346.23 **Mailable Class 6 Materials**

In addition to the mailable types of Division 6.1 and 6.2 materials cited in [346.21](#), the following materials are permitted to be mailed only within the conditions noted.

346.231 **Division 6.1, Toxic Substances**

- a. A Division 6.1 toxic substance that can qualify as a Limited Quantity and is a consumer commodity material is mailable by air or surface transport when all applicable conditions are met.
- b. *Toxic Substances with LD₅₀ Oral Toxicity of 50 mg/kg or Less.* A Division 6.1 toxic substance having an LD₅₀ for oral toxicity of greater than 5 mg/kg but less than or equal to 50 mg/kg is mailable only when sent between the following authorized parties and under the specified conditions:
 - (1) Toxic substances for scientific use (not outwardly or of their own force dangerous or injurious to life, health, or property) may be sent only between manufacturers, dealers, bona fide research or experimental scientific laboratories, and employees of federal, state, or local governments who have official use for such poisons and are designated by the agency head to receive or send such poisons. For domestic air transportation, a shipping paper is required.
 - (2) Poisonous drugs and medicines may be sent only from the manufacturer or dealer of the drugs and medicines to licensed physicians, surgeons, dentists, pharmacists, druggists, cosmetologists, barbers, and veterinarians (18 U.S.C. 1716). In limited circumstances, when the mailing is initiated by a drug manufacturer or the manufacturer's registered agent, customers may return prescription drugs to the manufacturer or its registered agent as indicated in [453.36](#).

346.232 **Other Nonregulated Toxic Materials**

Liquids and solids such as pesticides, insecticides, and herbicides that are not regulated as hazardous materials under 49 CFR are mailable subject to Postal Service quantity restrictions that are based on the toxicity of the material.

- a. *Liquids*. Restrictions are as follows, subject to the general packaging requirements of 451.3a and DMM 601.3.4:
- (1) A nonregulated toxic liquid having an LD₅₀ of 300 to 500 mg/kg is permitted in an aggregate quantity of 16 fluid ounces per mailpiece.
 - (2) A nonregulated toxic liquid having an LD₅₀ of 500 to 2,500 mg/kg is permitted in an aggregate quantity of 32 fluid ounces in glass or other breakable primary receptacles, or in an aggregate quantity of up to 1 gallon in non-breakable primary receptacles.
 - (3) A nonregulated toxic liquid having an LD₅₀ of 2,500 to 5,000 mg/kg is permitted in an aggregate quantity of 1 gallon in glass or other breakable primary receptacles, or in an aggregate quantity of up to 2 gallons in non-breakable primary receptacles.
 - (4) A nonregulated toxic liquid having an LD₅₀ of greater than 5,000 mg/kg is permitted with no quantity restriction.
 - (5) External markings specifying the contents and shipping papers are not required for nonregulated toxic liquids. Primary receptacles containing nonregulated toxic liquids having an LD₅₀ of 5000 mg/kg or less must be triple packaged (as specified in 451.3a and DMM 601.3.4) when the aggregate quantity of liquid exceeds 4 ounces in a single mailpiece.
- b. *Solids*. Restrictions are as follows:
- (1) A nonregulated toxic solid for which an LD₅₀ rate equivalent to liquids can be established is mailable under the same quantity restrictions for Division 6.1 toxic substances specified in Packaging Instruction 6A in Appendix C.
 - (2) Packaging requirements for a nonregulated toxic solid are the same as those for Division 6.1 toxic substance (see Packaging Instruction 6A in Appendix C), except that a single mailpiece may contain an aggregate quantity of up to 5 pounds.
 - (3) External markings specifying the contents and shipping papers are not required for nonregulated toxic solids.

346.233 **Division 6.2, Infectious Substances**

Infectious substances, biological products, cultures and stocks, exempt human or animal specimens, patient specimens, regulated medical waste, sharps medical waste, toxins, and used health care products are permitted to be mailed within specific quantity limits and packaging conditions specified in [346.3](#).

346.234 **Nonregulated Materials**

The following materials are not subject to regulation as Division 6.2 hazardous materials and are mailable when the packaging requirements specified in Packaging Instruction 6G in Appendix C are met:

- a. A biological product, including an experimental or investigational product or component of a product, subject to federal approval, permit, review, or licensing requirements, such as those required by the Food and Drug Administration of the U.S. Department of Health and Human Services or the U.S. Department of Agriculture. A biological product known or

suspected to contain a Category B infectious substance must be marked UN3373 (as shown in [Exhibit 346.12a2](#)) and packaged under [346.321](#). A biological product known or suspected to contain a Category A infectious substance is nonmailable.

- b. Blood collected for the purpose of blood transfusion or the preparation of blood products; blood products; plasma; plasma derivatives; blood components; tissues or organs intended for use in transplant operations; and human cell, tissue, and cellular and tissue-based products regulated under the Public Health Service Act (42 U.S.C. 264-272) or the Food, Drug, and Cosmetic Act (21 U.S.C. 332 et seq.).
- c. Blood, blood plasma, and blood components collected for the purpose of blood transfusion or the preparation of blood products and sent for testing as part of the collection process, except when the person collecting the blood has reason to believe it contains a Category B infectious substance, in which case the test sample must be shipped as a Category B infectious substance. Materials known or suspected to contain a Category A infectious substance are nonmailable.
- d. Dried blood spots, collected by applying a drop of blood to absorbent material, or dried specimens for fecal occult blood detection. (These materials are not classified as exempt human or animal specimens.)
- e. Forensic material containing a biological material, such as tissue, body fluid, excreta, or secreta, not expected to contain a Category A or Category B infectious substance and transported on behalf of a federal, state, local, or Indian tribal government agency. A forensic material known or suspected to contain a Category B infectious substance must be shipped as a Category B infectious substance. A forensic material known or suspected to contain a Category A infectious substance is nonmailable.

346.3 **Packaging, Marking, Labeling, and Documentation**

346.31 **Division 6.1, Toxic Substances**

Mailable toxic substances must be prepared as follows:

- a. Toxic Substances with LD₅₀ Oral Toxicity of 50 mg/kg or Less. The applicable requirements specified in [346.211](#) and [346.231](#) must be met. Packaging Instruction 6B in Appendix [C](#) must be followed. Each mailpiece must be plainly and durably marked on the address side with the proper shipping name and UN number of the material (unless exempted by [453.4](#)).
- b. *For air transportation*, parcels containing mailable Class 6 materials must bear the DOT square-on-point marking. The top and bottom portions of the square-on-point and the border forming the square-on-point must be black, and the center must be white or of a suitable contrasting background. The symbol “Y” must be black, located in the center of the square-on-point, and clearly visible. Mailpieces must also be marked with the proper shipping name “Consumer Commodity” and identification number “ID8000.” Each mailpiece must also bear an approved DOT Class 9 hazardous material warning label (see [Exhibit 325.3b](#)). A properly completed shipper’s declaration for

dangerous goods prepared in triplicate must be affixed to the outside of the mailpiece.

- c. *For surface transportation*, parcels must be plainly and durably marked on the address side with an approved DOT limited quantity marking, designating surface transportation (see [325.4](#)). Surface shipments bearing the limited quantity marking are not required to be marked with the proper shipping name and identification number. Limited Quantity material must meet the applicable requirements specified in [346.211](#) and [346.231](#). Packaging Instruction 6A in Appendix C must be followed.
- d. When the DOT square-on-point markings are used, markings must be durable, legible, and readily visible, and must be applied on at least one side or one end of the outer packaging. The border forming the square-on-point must be at least 2 mm in width, and the minimum dimension of each side must be 100 mm, unless the package size requires a reduced size marking of no less than 50 mm on each side.

346.32 **Division 6.2, Infectious Substances**

The proper packaging, marking, labeling, and documentation for mailable Division 6.2 materials are described in the following sections.

346.321 **Category B Infectious Substances**

Note: See Packaging Instruction 6C in Appendix [C](#).

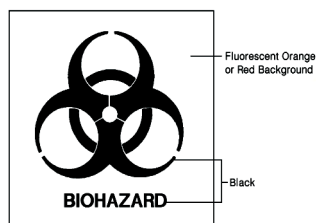
Regulated medical waste and sharps medical waste known or suspected to contain a Category A infectious substance is not mailable. A material that is classified as a Category B infectious substance and that meets the definition in [346.12a2](#) must be triple-packaged, meeting the packaging requirements in 49 CFR 173.199, and sent with First-Class Mail, Priority Mail, or Priority Mail Express service. Each primary receptacle containing a liquid must be leakproof and surrounded by absorbent material sufficient to protect the primary receptacle and absorb the total amount of liquid should the primary receptacle leak or break. Each primary receptacle containing a solid must be siftproof. Secondary containers for liquids must be leakproof. Secondary containers for solids must be siftproof. The primary and secondary packaging must be enclosed in a rigid outer shipping container. A single primary receptacle must not contain more than 1 liter (34 ounces) of a liquid specimen or 4 kg (8.8 pounds) of a solid specimen. Two or more primary receptacles whose combined volume does not exceed 4 liters (1 gallon) for liquids or 4 kg (8.8 pounds) for solids may be enclosed in a single secondary container. In addition:

- a. The secondary container must be marked with the international biohazard symbol shown in [Exhibit 346.321](#).
- b. The primary receptacle or secondary packaging must be capable of withstanding, without leakage, an internal pressure producing a pressure differential of not less than 95 kPa (0.95 bar, 14 psi) in the range of -40°F to 130°F (-40°C to 55°C).

- c. All mailpieces sent under 346.321 must be marked with the shipping name “Biological Substance, Category B” and “UN3373” (as shown in [Exhibit 346.12a2](#)) and as outlined in 49 CFR 173.199(a)(5) on the address side of the package unless specified in [221.1](#) and [325.1](#). Regulated medical waste and sharps medical waste as defined in [346.12f](#) and [346.12g](#) must be marked UN3291. See [346.322](#).
- d. Orientation arrows are not required on these mailpieces but may be used.
- e. The outer packaging must show the name and telephone number of a person who is knowledgeable about the material shipped and has comprehensive emergency response and incident mitigation information, or of someone who has immediate access to the person with such knowledge and information.

Exhibit 346.321

International Biohazard Symbol



346.322 Sharps Waste and Other Mailable Regulated Medical Waste

Note: See Packaging Instructions 6D in Appendix [C](#).

Regulated medical waste and sharps medical waste known or suspected to contain a Category A infectious substance is not mailable. Regulated medical waste and sharps medical waste as defined in [346.12f](#) and [346.12g](#) and containing materials classified as Category B infectious substances must be marked UN3291 and are permitted for mailing only using merchandise return service (see DMM 505.3) with First-Class Mail or Priority Mail service, subject to the following requirements:

- a. **Authorization.** Each vendor of a complete regulated medical waste or sharps waste mailing container system (including all component parts required to safely mail such waste to a storage or disposal facility) must obtain authorization from the Postal Service prior to mailing. Before applying for authorization, each type of mailing container system must be tested and certified under the standards in [346.322d](#) by an independent testing facility. The vendor in whose name the authorization is being sought must submit a written request to the manager of Product Classification at Postal Service Headquarters (see 214 for address). The request for authorization must contain the following:
 - (1) An irrevocable \$50,000 surety bond or letter of credit as proof of sufficient financial responsibility to cover disposal costs if the vendor ceases doing business before all its waste container systems are disposed of or to cover cleanup costs if spills occur while the containers are in Postal Service possession. The surety bond or letter of credit must be issued in the name of the vendor

seeking the authorization and must name the Postal Service as the beneficiary or obligee. Vendors that market their containers to distributors are responsible for disposal and cleanup costs attributed to those containers. In addition, vendors must provide a list of distributors, including firm names, addresses, and telephone numbers, to the Postal Service on request.

- (2) Address of the headquarters or general business office of the vendor seeking the authorization.
 - (3) Name, address, and phone number of each storage and disposal site.
 - (4) List of all types of mailing container systems to be covered by the request, a complete sample of each mailing container system, and proof of package testing certifications performed by the independent testing facility that subjected the packaging materials to the testing requirements in [346.322d](#).
 - (5) Copy of the proposed waste shipping paper to be used with each mailing container system.
 - (6) 24-hour toll-free telephone number for emergencies.
 - (7) List of the types of waste to be mailed for disposal in each mailing container system.
 - (8) Copy of the merchandise return service label to be used with each mailing container system and verification that the merchandise return service permit fee and accounting fee have been paid.
 - (9) Address of the Post Office or postage-due unit where the containers are delivered.
- b. *Packaging.* Regulated medical waste and sharps medical waste that also meet the definition of a Category A infectious substance are nonmailable, except for medical professional packages identified in [346.322b7](#), which may not weigh more than 35 pounds. A medical waste material treated by steam sterilization, chemical disinfections, or other appropriate method so that it no longer contains a Category A or Category B infectious substance must be packaged under [346.325](#). The packaging for regulated medical waste and sharps medical waste containing or suspected of containing a Category B infectious substance is subject to the following standards:
- (1) Regulated medical waste and sharps medical waste meeting the definitions in [346.12f](#) and [346.12g](#) must be collected in a rigid, securely sealed, and leakproof primary receptacle. For sharps waste, the primary receptacle must also be puncture-resistant and may not have a maximum capacity that exceeds 3 gallons in volume. For regulated medical waste, the primary receptacle may not have a maximum capacity that exceeds 5 gallons in volume. Each primary receptacle may not contain more than 50 ml (1.66 ounces) of residual waste liquid. Each primary receptacle must display the international biohazard symbol shown in [Exhibit 346.321](#). Package testing results must show that the

contents did not penetrate through the primary container during package testing and that the primary container can maintain its integrity at temperatures as low as 0°F and as high as 120°F (−18°C to 49°C).

- (2) The primary receptacle must be packaged within a watertight secondary container or containment system. The secondary container may consist of more than one component. If one of the components is a plastic bag, the bag must be at least 4 mil in thickness and must be used in conjunction with a fiberboard box. A plastic bag by itself does not meet the requirement for a secondary container. Several primary receptacles may be enclosed in a secondary container. The primary receptacle(s) must fit securely and snugly within the secondary container to prevent breakage during ordinary processing.
- (3) The secondary container must be enclosed in a strong outer shipping container constructed of 200-pound grade corrugated fiberboard. The joints and flaps of the outer shipping container must be securely taped, glued, or stitched to maintain the integrity of the container. When tape or glue is used to secure an outer shipping container, the material must be water-resistant. Fiberboard boxes with interlock bottom flaps (i.e., easy-fold) are not permitted as outer shipping containers unless reinforced with water-resistant tape. The secondary container must fit securely and snugly within the outer shipping container to prevent breakage during ordinary processing.
- (4) There must be enough material within the primary receptacle to absorb and retain three times the total liquid allowed within the primary receptacle (150 ml per primary receptacle) in case of leakage.
- (5) Each mailpiece must not weigh more than 25 pounds. Medical Professional Packages, as identified in [346.322b7](#), may not weigh more than 35 pounds. The container's maximum allowable weight must be printed on the outside of the box and on the assembly and closure instructions included with each mailpiece. The mailpiece must be tested at the maximum allowable weight identified by the vendor.
- (6) In each mailing container system, the authorized vendor must include a step-by-step instruction sheet that clearly details the proper sequence and method of container system assembly prior to mailing to prevent package failure during transport due to improper assembly. The instruction sheet must also include a customer service telephone number, or provide specific information on where such a telephone number is located elsewhere on the container system, for third-party end users to contact if they have assembly questions or find a component part is missing.

- (7) Medical professional packages are intended for use by small medical offices, but they are not limited to use by medical offices only. One primary receptacle larger than 5 gallons in volume may be used for mailing pre-primary sharps receptacles (sharps receptacles normally used in doctors' offices) and other regulated medical waste under the following conditions:
 - (a) The mailpiece must meet all the requirements in [346.32](#) except for the primary receptacle capacity limits of [346.322b1](#).
 - (b) Only rigid, securely closed, puncture- and leak-resistant pre-primary sharps receptacles that meet or exceed Occupational Safety and Health Administration (OSHA) standards as identified in 29 CFR 1910.1030 may be placed inside the primary receptacle. Each pre-primary sharps container may contain no more than 50 ml (1.66 ounces) of residual waste liquid. Several pre-primary sharps receptacles may be enclosed in the single primary receptacle.
 - (c) Multiple tie-closed plastic bags of regulated medical waste may be placed inside the single primary receptacle.
 - (d) The primary receptacle must be lined with a plastic bag at least 4 mil in thickness and must include sufficient absorbent material within the liner to absorb all residual liquid in the primary receptacle.
 - (e) The mailpiece must not weigh more than 35 pounds.
- c. *Mailpiece Labeling, Marking, and Documentation.* Regulated medical waste and sharps waste must meet the following requirements:
 - (1) Each primary receptacle and outer shipping container must bear a label, which cannot be detached intact, showing the following:
 - (a) The company name of the vendor to which the mailing authorization is issued.
 - (b) The USPS Authorization Number.
 - (c) The container ID number (or unique model number) signifying that the packaging material is certified and that the vendor obtained the authorization required by [346.322a](#).Place the label on the top or on a side of the container.
 - (2) The primary receptacle(s) and the outer shipping container must bear the international biohazard symbol in black with either a fluorescent orange or fluorescent red background as shown in [Exhibit 346.321](#). The symbol on the outer shipping container must be at least 3 inches high and 4 inches wide.
 - (3) Each mailpiece must have a four-part waste shipping paper. The shipping paper must be affixed to the outside of the mailpiece in an envelope or similar carrier that can be easily opened and resealed to allow review of the document. The shipping paper must comply with all applicable requirements imposed by the

laws of the state from which the container system is mailed. At a minimum, the information in [Exhibit 346.322c3](#) must be on the shipping paper.

- (4) The outer shipping container must bear a properly prepared merchandise return service label (see DMM 505.3). The merchandise return service permit must be held in the same name as that of the authorized medical waste vendor.
- (5) The outer shipping container must be marked on two opposite side walls with the package orientation marking in 49 CFR 173.312 to identify the proper upright position of the mailpiece during handling.
- (6) Mailpieces containing regulated medical waste or sharps waste must be marked with the correct UN number and proper shipping name (e.g., “Regulated Medical Waste, UN3291”, “Regulated Medical Waste-Sharps, UN3291”). The proper shipping name, identification number, and warning label, when applicable, must be marked on the address side of the package unless specified in [221.1](#) and [325.1](#).
- (7) Vendors must retrieve mailpieces held at processing facilities due to improper labeling, such as no return address, or due to improperly completed shipping papers.
- (8) For medical professional packages, the additional marking “Medical Professional Packaging” must be clearly printed in lettering at least 2 inches high on the address side of the outer shipping container.

Exhibit 346.322c3

Shipping Paper for Regulated Medical Waste and Sharps Waste Containers

| Section | Information Required |
|--|--|
| 1. Generator (Mailer) | <ul style="list-style-type: none"> a. Name. b. Complete address (not a Post Office box). c. Telephone number. d. Description of contents of mailing container. "Regulated Medical Waste" or "Regulated Medical Waste-Sharps" is required as appropriate. e. Date container was mailed. f. State permit number of approved facility in which contents are to be disposed of. |
| 2. Destination Facility (Disposal Site) | Complete address (not a Post Office box). |
| 3. Generator's (Mailer's) Certification | <p>The following certification statement must be printed on the shipping paper:</p> <p>"I certify that this container has been approved for the mailing of [insert either "regulated medical waste" or "sharps waste," as appropriate], has been prepared for mailing in accordance with the directions for that purpose, and does not contain excess liquid or nonmailable material in violation of the applicable Postal Service regulations. I AM AWARE THAT FULL RESPONSIBILITY RESTS WITH THE GENERATOR (MAILER) FOR ANY VIOLATION OF 18 U.S.C. 1716 WHICH MAY RESULT FROM PLACING IMPROPERLY PACKAGED ITEMS IN THE MAIL. I also certify that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and in proper condition for carriage by air according to the national governmental regulations."</p> <p>This statement must be followed by printed or typewritten name of generator (mailer), signature of generator, and date signed.</p> |
| 4. Destination Facility (Storage or Disposal Site) | <p>The following certification statement of receipt, treatment, and disposal must be printed on the shipping paper:</p> <p>"I certify that the contents of this container have been received, treated, and disposed of in accordance with all local, state, and federal regulations."</p> <p>This statement must be followed by printed or typewritten name of an authorized recipient at destination facility, signature of authorized recipient, and date signed.</p> |
| 5. Transporter Intermediate Handler Other Than the Postal Service (If Different From Destination Facility) | <ul style="list-style-type: none"> a. Name. b. Complete address (not a Post Office box). c. Printed or typewritten name of transporter or intermediate handler. d. Signature of transporter or intermediate handler and date signed. |
| 6. Serialized Waste Shipping Papers | Each waste shipping paper or mail disposal service shipping record must be serialized using a unique numbering system for identification purposes. |
| 7. Comment Area | Each shipping paper must contain an area designated for entering comments or noting discrepancies. |
| 8. Completion and Distribution of Waste Shipping Paper | <p>Each shipping paper must contain instructions for properly completing the four-part form. Copies of the form must be distributed as follows:</p> <ul style="list-style-type: none"> a. One copy must be kept by generator (mailer). b. One copy must be kept by transporter or intermediate handler for 90 days. c. One copy must be kept by destination facility for 90 days. d. One copy must be mailed to generator by destination facility. |
| 9. Emergency Telephone Number | <p>Each shipping paper must bear the following statement with appropriate information:</p> <p>"IN CASE OF EMERGENCY, OR THE DISCOVERY OF DAMAGE OR LEAKAGE, CALL 1-800-###-####."</p> |

- d. *Package Testing.* Vendors must submit to the manager, Product Classification (see [214](#) for address) package testing results from an independent testing facility for each package for which the vendor is requesting authorization. In addition, vendors must submit package testing results from an independent testing facility when the design of a container system changes or every 24 months, whichever occurs first. The test results must show that, if every mailpiece prepared for mailing were subject to the environmental and test conditions in 49 CFR and the additional test requirements in [346.322e](#), no contents would be released into the environment and the effectiveness of the packaging would not be significantly reduced. The Postal Service may require proof of accreditation or other documentation to support the credentials of an independent testing facility.

Packages tested for approval as medical professional packages may not be tested using pre-primary containers that are currently or have previously been approved as Postal Service primary containers. In addition, test reports must identify by brand name the pre-primary containers that were used during testing.

- e. *Testing Criteria.* Each mailpiece must pass each of the tests described below:
- (1) *Leakproof Test.* The test must be conducted on one primary receptacle with the lid in place, without the secondary and outer packaging. The test duration must be at least 5 minutes and must be conducted at 20 kPa (3 psi). The pass/fail criterion is as follows: no air leakage from anywhere other than the closure of the primary receptacle. Air leakage at the closure is not considered a failure if the primary receptacle passes the test for watertightness as determined by placing 50 ml of deionized water into the primary receptacle, securing the closure, and then turning the container on its side and observing for any evidence of leakage. Any evidence of water leaking from the primary receptacle is a failure.
 - (2) *Stacking Test.* One mailpiece must withstand the test in 49 CFR 178.606. The dynamic compression test must be conducted on the empty, unsealed mailpiece assembled for mailing, without the primary receptacle(s). The test mass is the vendor-identified maximum weight, not to exceed 25 pounds, as indicated on the outer shipping container and on the assembly and closing instructions. A compensation factor of 1.5 must be used to compute the test load, based on the vendor-identified weight. The pass/fail criteria are as follows: no buckling of the sidewalls sufficient to cause damage to the contents in the primary receptacle, and in no case does the deflection exceed 1 inch.
 - (3) *Vibration Test.* One mailpiece filled with sharps or other regulated medical waste must withstand the test in 49 CFR 178.608. The test mailpiece is filled with sharps or other regulated medical waste to the vendor-identified maximum weight, not to exceed 25 pounds, as indicated on the outer shipping container and on

the assembly and closing instructions. The test sample is prepared as it would be for mailing. The pass/fail criterion is as follows: no rupture, cracking, or splitting of any primary receptacle.

- (4) *Wet Drop Test.* Five mailpieces filled with sharps or other regulated medical waste must withstand the test in 49 CFR 178.609e. Each test mailpiece is filled with sharps or other regulated medical waste to the vendor-identified maximum weight, not to exceed 25 pounds, as indicated on the outer shipping container and on the assembly and closing instructions included with each mailpiece. Each mailpiece is prepared as it would be for mailing and subjected to a water spray as described in the test. A separate, untested mailpiece is used for each drop orientation: top, longest side, shortest side, and corner. The pass/fail criteria are as follows: no rupture, cracking, or splitting of any primary receptacle, and no contents may penetrate into or through the body or lid of any primary receptacle.
- (5) *Cold Drop Test.* Five mailpieces filled with sharps or other regulated medical waste must withstand the test in 49 CFR 178.609f. Each test mailpiece is filled with sharps or other regulated medical waste to the vendor-identified maximum weight, not to exceed 25 pounds, as indicated on the outer shipping container and on the assembly and closing instructions included with each mailpiece. Each mailpiece is prepared as it would be for mailing and chilled as described in the test. A separate, untested mailpiece is used for each drop orientation: top, longest side, shortest side, and corner. The pass/fail criteria are as follows: no rupture, cracking, or splitting of any primary receptacle, and no contents may penetrate into or through the body or lid of any primary receptacle.
- (6) *Impact Test.* One mailpiece filled with sharps or other regulated medical waste must withstand the test in 49 CFR 178.609h. The test mailpiece is filled with sharps or other regulated medical waste to the vendor-identified maximum weight, not to exceed 25 pounds, as indicated on the outer shipping container and on the assembly and closing instructions included with each mailpiece. The mailpiece is prepared as it would be for mailing. The pass/fail criteria are as follows: no rupture, cracking, or splitting of any primary receptacle, and no contents may penetrate into or through the body or lid of any primary receptacle.
- (7) *Puncture-Resistant Test.* Package testing results must show that, during all of the previous tests, the contents did not penetrate through the primary receptacle.
- (8) *Temperature Test.* Package testing results must show that each primary receptacle maintained its integrity when exposed to temperatures as low as 0°F and as high as 120°F (–18°C to 49°C).

- (9) *Absorbency Test.* Package testing results must show that the primary receptacle(s) contain enough absorbent material to absorb three times the total liquid allowed within the primary receptacle in case of leakage. Absorbency is determined by pouring 150 ml of deionized water into the primary receptacle(s), then turning the receptacle(s) upside down and observing for any evidence of free liquid not absorbed on contact. Any evidence of free liquid is a failure.
 - (10) *Watertight Test.* Package testing results must show that no leakage occurred when 50 ml of deionized water was placed into the secondary containment system and the entire system was turned upside down for 5 minutes.
- f. *Suspension of Authorization.* The Postal Service may suspend a vendor's authorization based on information that a mailpiece no longer meets the standards for mailing sharps medical waste and regulated medical waste containers, or that the mailpiece poses an unreasonable safety risk to Postal Service employees or the public. The suspension can be made immediately, making the mailpiece nonmailable immediately. The vendor may contest a decision to suspend authorization by writing to the manager, Product Classification (see [214](#) for address) within 7 days from the date of the letter of suspension. The appeal should provide evidence demonstrating why the decision should be reconsidered. Any order suspending authorization remains in effect during an appeal or other challenge. When a vendor is notified that its authorization to mail sharps or other regulated medical waste containers has been suspended, the vendor must immediately do the following:
- (1) Recall all identified containers.
 - (2) Notify all customers that they cannot mail the identified containers.
 - (3) Suspend sales and distribution of all identified containers.
 - (4) Collect the identified containers from distributors, consumers, and the Postal Service without using the mail and in accordance with all federal and state regulations.

346.323 **Used Health Care Products**

Note: See Packaging Instruction 6E in Appendix [C](#).

A used health care product known or reasonably suspected to contain a Category A material is nonmailable. A used health care product not suspected to contain an infectious material, or that is known or suspected to contain a Category B infectious substance and is being returned to the manufacturer or manufacturer's designee is mailable with First-Class Mail, Priority Mail, or Priority Mail Express service subject to the following packaging requirements:

- a. Each used health care product must be drained of liquid to the extent possible and placed in a watertight primary receptacle designed and constructed to ensure that it remains intact under normal conditions of transport. For a used health care product capable of cutting or penetrating skin or packaging material, the primary receptacle must be

capable of retaining the product without puncture of the packaging under normal conditions of transport. The primary receptacle must be marked with the international biohazard symbol shown in [Exhibit 346.321](#).

- b. Each primary receptacle must be placed inside a watertight secondary container designed and constructed to ensure that it remains intact under normal conditions of transport. The secondary container must also be marked with the international biohazard symbol shown in [Exhibit 346.321](#).
- c. The secondary container must be placed inside an outer shipping container with sufficient cushioning material to prevent movement between the secondary container and the outer shipping container. An itemized list of the contents of the primary receptacle and information concerning possible contamination with a Division 6.2 material, including its possible location on the product, must be placed between the secondary container and the outer shipping container. A shipping paper and a content marking on the outer shipping container are not required.

346.324 **Forensic Material in Category B**

Note: See Packaging Instruction 6F in Appendix [C](#).

Forensic material containing a biological material, such as tissue, body fluid, excreta, or secretions, and sent on behalf of a federal, state, local, or Indian tribal government agency must be packaged under [346.325](#) when it is not known or suspected to contain a Category A or Category B infectious substance. Forensic material known or suspected to contain a Category A infectious substance is nonmailable. Forensic material known or suspected to contain a Category B infectious substance as identified in [346.321](#) is mailable with First-Class Mail, Priority Mail, or Priority Mail Express service when triple-packaged in a primary receptacle, secondary container, and a rigid outer shipping container as follows:

- a. The forensic material must be held within a securely sealed primary receptacle. The primary receptacle must be surrounded by sufficient absorbent material (for liquids) and cushioning material to protect the primary container from breakage. The absorbent material must be capable of taking up the entire liquid contents of the primary receptacle in case of leakage. The primary receptacle must be marked with the international biohazard symbol shown in [Exhibit 346.321](#).
- b. The primary receptacle and the absorbent and cushioning material must be enclosed in a watertight and securely sealed secondary container. The secondary container must also display the international biohazard symbol shown in [Exhibit 346.321](#).
- c. The secondary container must be firmly and snugly packed within a strong outer shipping container that is securely sealed. A shipping paper and a content marking on the outer shipping container are not required.

346.325 Nonregulated Materials

Note: See Packaging Instruction 6G in Appendix C.

Nonregulated materials as defined in [346.234](#) are not subject to regulation as hazardous materials but must be properly packaged when presented for mailing. Regulated medical waste and sharps medical waste must be packaged and mailed under [346.322](#), and used health care products must be packaged and mailed under [346.323](#). Exempt human and animal specimens must be packaged under [346.326](#). Nonregulated materials are mailable as Priority Mail Express, Priority Mail, First-Class Mail, First-Class Package Service, Parcel Select, or USPS Retail Ground. Such materials must be held within a securely sealed primary receptacle. The primary receptacle must be surrounded by sufficient absorbent material (for liquids) and cushioning material to protect the primary receptacle from breakage. The absorbent material must be capable of taking up the entire liquid contents of the primary receptacle in case of leakage. Either the primary receptacle or the inner packaging must be marked with the international biohazard symbol shown in [Exhibit 346.321](#). The primary receptacle and the absorbent and cushioning material must be snugly enclosed in a rigid outer shipping container that is securely sealed. A shipping paper and a content marking on the outer shipping container are not required. Nonregulated material specimens and biological products are subject to the following packaging standards:

- a. *Liquid Patient Specimens and Biological Products.* Mailers must package a liquid nonregulated patient specimen, a forensic specimen, or a biological product (such as polio vaccine) as follows:
 - (1) *Not exceeding 50 ml.* A patient specimen or biological product consisting of 50 ml or less per mailpiece must be packaged in a securely sealed primary receptacle. Two or more primary receptacles whose combined volume does not exceed 50 ml may be enclosed within a single mailpiece. Sufficient absorbent material and cushioning material to withstand shock and pressure changes must surround the primary receptacle(s), or be otherwise configured to take up the entire liquid contents in case of leakage. The primary receptacle(s) and the absorbent cushioning must be enclosed in a secondary container with a leakproof barrier that can prevent failure of the secondary container if the primary receptacle(s) should leak during transport. The secondary container must be securely sealed, and it may serve as the outer shipping container if it has sufficient strength to withstand ordinary postal processing. The secondary container must be marked with the international biohazard symbol shown in [Exhibit 346.321](#), except when the secondary container also serves as the outer shipping container. In that case, the biohazard symbol must appear on the inner packaging or on the primary container. A shipping paper and a content marking on the outer shipping container are not required.
 - (2) *Exceeding 50 ml.* A liquid patient specimen, forensic material, or biological product that exceeds 50 ml must be packaged in a securely sealed primary receptacle. A single primary receptacle

must not contain more than 500 ml of specimen. Two or more primary receptacles whose combined volume does not exceed 500 ml may be enclosed in a single secondary container. Sufficient absorbent material and cushioning material to withstand shock and pressure changes must surround the primary receptacle(s), or be otherwise configured to take up the entire liquid contents in case of leakage. The primary receptacle(s) and the absorbent cushioning must be enclosed in a secondary container with a leakproof barrier that can prevent failure of the secondary container if the primary receptacle(s) should leak during transport. The secondary container cannot serve as the outer shipping container. The secondary container must be marked with the international biohazard symbol shown in [Exhibit 346.321](#). The secondary container must be securely and snugly enclosed in a fiberboard box or container of equivalent strength that serves as the outer shipping container. A shipping paper and a content marking on the outer shipping container are not required.

- b. *Solid or Dry Specimen.* A solid or dry specimen, such as a saliva swab, blood spot, fecal smear, culture or stock, or forensic material, must be completely dried before packaging in a mailing container or envelope. Cushioning material to withstand shock and pressure changes is required only if the dry specimen is placed in a breakable primary receptacle. When required, the cushioning material must surround the primary receptacle. The primary receptacle (and cushioning material, if required) must be enclosed in a secondary container with a siftproof barrier that can prevent failure of the secondary container if the primary receptacle breaks during shipment. The secondary container must be securely sealed, and it may serve as the outer shipping container if it has sufficient strength to withstand ordinary postal processing. The secondary container must be marked with the international biohazard symbol shown in [Exhibit 346.321](#), except when the secondary container also serves as the outer shipping container. In that case, the biohazard symbol must appear either on the inner packaging or on the primary receptacle. A shipping paper and a content marking on the outer shipping container are not required.

346.326 **Exempt Human or Animal Specimens**

Note: See Packaging Instruction 6H in Appendix [C](#).

Exempt human or animal specimens as defined in [346.12d](#) are not subject to regulation as hazardous materials but when presented for mailing must be triple-packaged in leakproof (for liquids) or siftproof (for solids) primary receptacles. Sufficient cushioning and absorbent materials must surround each primary receptacle containing liquid. Secondary containers for liquids must be leakproof. Secondary containers for solids must be siftproof. The primary and secondary packaging must be enclosed in a rigid outer shipping container. A single primary receptacle must not contain more than 500 ml of a liquid specimen or 500 grams of a solid specimen. Two or more primary receptacles whose combined volume does not exceed 500 ml (for liquids) or 500 grams (for solids) may be enclosed in a single secondary container. The

secondary container cannot serve as the outer shipping container. The secondary container must be marked with the international biohazard symbol shown in [Exhibit 346.321](#). The secondary container must be securely and snugly enclosed in a fiberboard box or container of equivalent strength that serves as the outer shipping container. A shipping paper is not required. The outer shipping container must be marked on the address side with the words “Exempt human specimen” or “Exempt animal specimen,” as appropriate. In addition, at least one surface of the outer packaging must have a minimum dimension of 3.9 inches by 3.9 inches (100 mm by 100 mm). Exempt human and animal specimens are mailable as Priority Mail Express, Priority Mail, First-Class Mail, First-Class Package Service, Parcel Select, or USPS Retail Ground.

346.327 Proper Packaging of Mailable Materials

All mailable materials as identified in [346.212](#) must be properly packaged. [Exhibit 346.327](#) lists the specific reference in [346](#) under which each type of mailable material must be packaged.

Exhibit 346.327

Packaging References for Mailable Materials, Infectious Substances (Hazard Class 6, Division 6.2)

| Material Being Mailed | Packaging Standards ¹ | | |
|---------------------------------|----------------------------------|------------|------------|
| | Nonregulated | Category A | Category B |
| Blood for Transfusion | 346.325 | nm | 346.321 |
| Biological Product | 346.325 | nm | 346.321 |
| Culture or Stock | 346.325 | nm | 346.321 |
| Patient Specimen | 346.325 | nm | 346.321 |
| Exempt Human or Animal Specimen | 346.326 | n/a | n/a |
| Forensic Material | 346.325 | nm | 346.324 |
| Regulated Medical Waste | 346.322 | nm | 346.322 |
| Sharps Waste | 346.322 | nm | 346.322 |
| Toxin ² | 346.31 | nm | 346.321 |
| Treated Medical Waste | 346.325 | n/a | n/a |
| Used Health Care Product | 346.323 | nm | 346.323 |

1. nm = Nonmailable.

n/a = Not applicable.

2. Toxin means a Division 6.1 material from a plant, animal, or bacterial source. A toxin containing an infectious substance or a toxin contained in an infectious substance must be classified as Division 6.2; described as an infectious substance; and assigned to UN2814, UN2900, or UN3373, as appropriate. A Division 6.1 toxin that can qualify as Limited Quantity surface is permitted when packaged in accordance with [346.231](#) or [346.31](#).

346.4 Damaged Parcels

If a mailpiece containing a Class 6 material is found to be damaged or leaking during Postal Service handling, the incident must be reported in accordance with POM 139.117 and 139.118 and Handbook EL-812, *Hazardous Materials and Spill Response* (in Part VII, “Response to Hazardous Material Incidents and Emergencies,” see the section titled “Hazardous Materials Incident Reports”), as appropriate. The local Postal Service safety officer (or designee) must immediately initiate the spill response procedures in Handbook EL-812. For spills involving infectious substances (etiologic agents), the following containment and cleanup steps must also be followed:

- a. Wear rubber gloves throughout the spill cleanup procedure.
- b. Surround the leaking package with absorbent material.
- c. Place the leaking package in another box and seal the box.
- d. Place the sealed box in a plastic bag and seal the bag.
- e. Flood affected surfaces and rinse rubber gloves with household chlorine bleach, diluted 1 ounce to 1 gallon of water, and let stand for 5 minutes. Use caution with the chlorine bleach because it is a mildly corrosive oxidizer. Wipe surfaces dry with an absorbent material, place the absorbent material in a plastic bag, and incinerate.
- f. Report the damaged parcel to the Centers for Disease Control and Prevention (CDC) at the telephone number listed in [246](#).
- g. Never dispose of etiologic agents in the trash. Contact the area environmental compliance specialist for specific information on the appropriate disposal procedures.

347 Radioactive Materials (Hazard Class 7)**347.1 Definition**

Radioactive material is defined in 49 CFR 173.403 as any material containing radionuclides where both the activity concentration and the total activity in the consignment exceed the values specified in the table in 49 CFR 173.436 or values derived according to the instructions in 49 CFR 173.433.

347.2 Mailability

The following conditions apply:

- a. *International Mail.* Radioactive material is prohibited in international mail if required to bear a Class 7 Radioactive White-I, Radioactive Yellow-II, or Radioactive Yellow-III hazardous materials warning label (see [Exhibit 325.2](#)). See IMM 135.5 for the specific admissibility requirements that are applicable to international shipments of radioactive material. Mailable radioactive materials shipments may be sent only via First-Class Package International Service with Registered Mail service. Mailable radioactive materials may not have an activity content that exceeds one-tenth of the limits in [Exhibit 347.22](#).
- b. *Domestic Mail via Air Transportation.* All radioactive material is prohibited in domestic air transportation.

- c. *Domestic Mail via Surface Transportation.* Radioactive material is prohibited if it is required to bear a Class 7 Radioactive White-I, Radioactive Yellow-II, Radioactive Yellow-III hazardous materials warning label, or the Fissile label (see [Exhibit 325.2](#)). Mailable radioactive materials may not have an activity content that exceeds the limits in [Exhibit 347.22](#), and must be one of the following materials (proper shipping names and UN identification numbers in 49 CFR 172.101):
- (1) A radioactive material eligible to be shipped as a limited quantity under 49 CFR 172.101, Radioactive material, excepted package — Limited quantity of material, UN2910.
 - (2) An excepted instrument, article, or device including an instrument and manufactured article (such as a clock, electronic tube, or apparatus) or a similar device that has a radioactive material in gaseous or nondispersible solid form as a component part, Radioactive material, excepted package — instruments or articles, UN2911.
 - (3) An excepted article containing natural uranium or thorium, including manufactured articles in which the sole radioactive material is natural or depleted uranium or natural thorium, Radioactive material, excepted package — articles manufactured from natural uranium or depleted uranium or natural thorium, UN2909.

347.21 **Nonmailable Radioactive Materials**

Any package bearing, or required to bear, one of the Class 7 hazardous materials warning labels for radioactive materials shown in [Exhibit 325.2](#) is nonmailable under any conditions. Report nonmailable materials found in the mailstream to the appropriate officials in accordance with POM 139.117 and 139.118, as applicable. See 347.5 for emergency procedures.

347.22 **Mailable Radioactive Materials**

As stated in [347.2](#), the only categories of radioactive material that are mailable in international mail or in domestic mail via surface transportation are those that do not have an activity level exceeding the limits in [Exhibit 347.22](#) and are eligible under 49 CFR to be shipped as excepted packages for limited quantities; excepted packages for instruments and articles; and excepted packages for articles containing natural uranium or thorium. The mailer must provide accurate documentation of the activity limits, which must not exceed those specified in [Exhibit 347.22](#).

Exhibit 347.22

Activity Limits for Mailable Instruments, Articles, and Limited Quantity Radioactive Materials

| Nature of Contents | Instruments and articles | | Materials Package Limits ¹ |
|--|--|-------------------------------------|---------------------------------------|
| | Limits for Each Instrument or Article ¹ | Package Limits ¹ | |
| Solids: | | | |
| Special form | 10 ⁻² A ₁ | A ₁ | 10 ⁻³ A ₁ |
| Normal form | 10 ⁻² A ₂ | A ₂ | 10 ⁻³ A ₂ |
| Liquids: | | | |
| Tritiated water: | | | |
| <0.0037 TBq/liter (0.1 Ci/L) | 10 ⁻³ A ₂ | 10 ⁻¹ A ₂ | 37 TBq (1000 Ci) |
| 0.0037 TBq to 0.037 TBq/L (0.1 Ci to 1.0 Ci/L) | | | 3.7 TBq (100 Ci) |
| >0.037 TBq/L (1.0 Ci/L) | | | 0.037 TBq (1.0 Ci) |
| Other Liquids: | 10 ⁻³ A ₂ | 10 ⁻¹ A ₂ | 10 ⁻⁴ A ₂ |
| Gases: | | | |
| Tritium ² | 2 x 10 ⁻² A ₂ | 2 x 10 ⁻¹ A ₂ | 2 x 10 ⁻² A ₂ |
| Special form | 10 ⁻³ A ₁ | 10 ⁻² A ₁ | 10 ⁻³ A ₁ |
| Other form | 10 ⁻³ A ₂ | 10 ⁻² A ₂ | 10 ⁻³ A ₂ |

1. For mixture of radionuclides, see 49 CFR 173.433(d).

2. These values also apply to tritium in activated luminous paint and tritium adsorbed on solid carriers.

347.3 Packaging

The following packaging requirements apply:

- a. *Limited Quantities* (49 CFR 173.421). Radioactive materials whose activity per package does not exceed the limits specified in [Exhibit 347.22](#) are excepted from specification packaging, marking, and labeling requirements. All applicable conditions for Packaging Instruction 7A in Appendix [C](#) must be met.
- b. *Instruments and Articles* (49 CFR 173.424). Instruments and manufactured articles (including clocks, electronic tubes, or apparatus) or similar devices having radioactive materials in gaseous or nondispersible solid form as a component part (whose activity level does not exceed the limits specified in [Exhibit 347.22](#)) are excepted from specification packaging, marking, and labeling requirements. All applicable conditions for Packaging Instruction 7A in Appendix [C](#) must be met.
- c. *Excepted Articles Containing Uranium or Thorium* (49 CFR 173.426). Manufactured articles in which the sole radioactive material is natural or depleted uranium or natural thorium (whose activity level does not exceed the limits specified in [Exhibit 347.22](#)) are excepted from specification packaging, marking, and labeling requirements. All applicable conditions for Packaging Instruction 7A in Appendix [C](#) must be met.

- d. For mailpieces intended for domestic transportation, the radiation level at any point on the external surface of the mailpiece must not exceed 0.5 millirem per hour.

347.4 **Marking**

The outside of the inner receptacle or the outside of the secondary packaging must be marked "Radioactive." The address side of the mailpiece must clearly and prominently display one of the following markings, as applicable:

- a. *Mailable Limited Quantity Shipments.* "This package conforms to the conditions and limitations specified in 49 CFR 173.421 for radioactive material, excepted package—limited quantity of material, UN2910, and is within Postal Service activity limits for mailing."
- b. *Mailable Instruments and Articles.* "This package conforms to the conditions and limitations specified in 49 CFR 173.424 for radioactive material, excepted package—instruments or articles, UN2911, and is within Postal Service activity limits for mailing."
- c. *Mailable Excepted Articles Containing Uranium or Thorium.* "This package conforms to the conditions and limitations specified in 49 CFR 173.426 for radioactive material, excepted package—articles manufactured from natural uranium (or natural thorium), UN2909, and is within Postal Service activity limits for mailing."

347.5 **Emergency Procedures**

When a nonmailable package of radioactive material is discovered intact in the mailstream, the following procedures must be immediately followed:

- a. Place the parcel at least 15 feet from other mail or personnel. Under no circumstances may the package be dispatched.
- b. Report the mailpiece to the appropriate officials in accordance with POM 139.117 and 139.118, as applicable.
- c. If a package of radioactive material is damaged or is leaking, immediately contact the facility safety officer (or designee). The safety officer will:
 - Follow the appropriate spill-response procedures.
 - Isolate the area around the damaged package to prevent contact with people.
 - Isolate any conveyor, belt, chute, or other equipment or conveyance, including mailbags, in which the radioactive material has leaked or may have leaked.
 - Rope off or guard the isolated area whenever practical.
 - Place a temporary sign indicating the presence of radioactive materials and bearing a warning to stay beyond the edge of the roped area.

The local postmaster or facility manager must immediately request the assistance of qualified persons to check radiation hazards and to supervise the salvage and decontamination. This assistance may be received from the mailer (if known) or from one of the following contacts:

- (1) Nearest office of the Department of Energy (DOE) as listed in [Exhibit 347.5c\(1\)](#) or DOE's national emergency number and website are:

DEPARTMENT OF ENERGY (DOE)
EMERGENCY OPERATIONS CENTER

Telephone: 202-586-8100

www.doe.gov

- (2) Local health, fire, or police departments.
- (3) Local civil defense authorities.
- (4) Nearby military installations.
- (5) Nearby scientific laboratories.
- (6) The Nuclear Regulatory Commission, the Environmental Protection Agency, and the Federal Emergency Management Agency, whose national emergency numbers and websites are as follows:

NUCLEAR REGULATORY COMMISSION (NRC)

Telephone: 301-816-5100

www.nrc.gov

ENVIRONMENTAL PROTECTION AGENCY (EPA)
NATIONAL RESPONSE CENTER

Telephone: 800-424-8802

www.epa.gov

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)
NATIONAL EMERGENCY COORDINATION CENTER

Telephone: 202-646-2400

www.fema.gov

Exhibit 347.5c(1)

DOE Regional Coordinating Offices

| Department of Energy | | |
|---|---------------------------------|--|
| Regional Coordinating Offices for Geographical Areas of Responsibility | | |
| Regional Coordinating Office | Telephone for Assistance | Areas Served |
| 1. Brookhaven, NY | 631-344-2200 | Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont |
| 2. Oak Ridge, TN | 865-576-1005 | Arkansas, Kentucky, Louisiana, Mississippi, Missouri, Tennessee, Virginia, West Virginia (includes Puerto Rico and the Virgin Islands) |
| 3. Savannah River, SC | 803-725-3333 | Alabama, Florida, Georgia, North Carolina, South Carolina |
| 4. Albuquerque, NM | 505-845-4667 | Arizona, Kansas, New Mexico, Oklahoma, Texas |
| 5. Chicago, IL | 630-252-4800 | Illinois, Indiana, Iowa, Michigan, Minnesota, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin |
| 6. Idaho Falls, ID | 208-526-1515 | Colorado, Idaho, Montana, Utah, Wyoming |
| 7. Oakland, CA | 925-422-8951 | California, Hawaii, Nevada |
| 8. Richland, WA | 509-373-3800 | Alaska, Oregon, Washington |
| Headquarters – Washington, DC | 202-586-8100 | |

348 **Corrosives (Hazard Class 8)**348.1 **Definition**

A *corrosive* is any liquid or solid that causes visible destruction or irreversible alteration in human skin tissue at the site of contact, or a liquid that has a severe corrosion rate on steel. The term “corrosive” includes all items commonly referred to as acids, as well as most batteries.

348.2 **Mailability**

- a. *International Mail.* All corrosives are prohibited.
- b. *Domestic Mail.* A corrosive material that qualifies as a Limited Quantity air or Limited Quantity surface transportation is permissible. Mailable corrosives are also subject to the following:
 - (1) A liquid mixture must be 1 pint (16 oz) or less and must contain 15 percent or less corrosive material, with the remainder of the mixture not being a hazardous material, unless otherwise specified in [348.22](#) for a specific corrosive material.
 - (2) A solid mixture must be 10 pounds or less per primary receptacle and must contain 10 percent or less corrosive material, with the remainder of the mixture not being a hazardous material, unless otherwise specified for a specific corrosive solid.

348.21 Nonmailable Corrosives

Nonmailable corrosives include the following:

- a. *Batteries* (UN2794, UN2795) with liquid electrolyte (such as automobile lead acid batteries), except for the nonspillable type allowed under [348.22](#).
- b. *Nitric Acid* (UN2031, UN2032).
- c. *Fuming and Spent Sulfuric Acids* (UN1831, UN1832).
- d. *Hydrofluoric Acid* (UN1790).
- e. Mercury (UN2809), and devices containing metallic mercury, such as thermometers, barometers, and sphygmomanometers (i.e., blood pressure meters).

348.22 Mailable Corrosives

As a rule, liquid corrosives are limited to 15 percent solution or less as stated in [348.2](#), unless otherwise specified below. Mailable corrosives include the following:

- a. *Acetic Acid* (UN2790). Acceptable in solutions that can qualify as a Limited Quantity air material or Limited Quantity surface material, contains less than 80 percent acid, and does not exceed 1 pint. Packaging Instruction 8A must be followed.
- b. *Batteries*. Mailable batteries include:
 - (1) Common household dry-cell batteries such as sizes AA, AAA, C, D, etc. are generally not regulated as hazardous materials and are therefore mailable. For nickel-metal hydride batteries in sea transportation, see 49 CFR 122.102, Special Provision 130. Packaging requirements in DMM 601.1-7 apply.
 - (2) A nonspillable wet battery containing liquid electrolyte is permitted to be mailed only if the battery casing is completely sealed to prevent the liquid corrosive from spilling during Postal Service handling. Nonspillable batteries with UN2800 are prohibited in international mail but may be sent as domestic mail via air or surface transportation when prepared within the conditions of Packaging Instruction 8B in Appendix [C](#).
 - (3) For lithium and lithium-ion batteries, see [349.22](#).
- c. *Hydrochloric Acid* (UN1789). Acceptable only in solutions not exceeding 10 percent acid that can qualify as a Limited Quantity air material or Limited Quantity surface material. Packaging Instruction 8A in Appendix [C](#) must be followed.
- d. *Sulfuric Acid* (UN2796). Acceptable only in solutions of 25 percent or less acid that can qualify as a Limited Quantity air or Limited Quantity surface material. Packaging Instruction 8A in Appendix [C](#) must be followed.
- e. *Dyes* (UN2801, UN3147). Acceptable if the dyes can qualify as Limited Quantity air material or Limited Quantity surface material. Mailable dyes must be packaged as required in [348.3](#) and Packaging Instruction 8A in Appendix [C](#).

- f. *Photographic Mixtures*. Acceptable if the corrosive liquid solutions for preparing photographic processing mixtures can qualify as a Limited Quantity air material or Limited Quantity surface material. Packaging Instruction 8A in Appendix [C](#) must be followed. When these liquids are in securely closed and sealed bottles that are properly cushioned, they may be packed in the same outside shipping container with required amounts of packaged dry chemicals not classified as hazardous materials (provided no dangerous reaction would occur should the contents of the bottles be mixed with the dry chemicals).
- g. *Manufactured devices that contain small amounts of mercury* (UN3506). Compact Fluorescent Lamps (CFL) and similar consumer devices containing minute amounts of mercury are mailable by air or surface only when each device, article, or apparatus contains 100 milligrams (mg) (0.0035 ounce) or less of mercury (less than a grain of salt) and each mailpiece contains no more than 1 gram (g) (0.035 ounce) of mercury. Mercury contained in devices categorized under UN3506 typically exists in a vaporized state — no metallic mercury will be visible in UN3506 devices. See Packaging Instruction 8C in Appendix [C](#) for mailing details.

348.3 **Packaging**

Mailable corrosives, both liquids and solids, must meet the applicable requirements in 348.2b and be prepared as required in Packaging Instruction 8A in Appendix [C](#), or as permitted in [348.22](#).

348.4 **Marking and Documentation**

All labels and text markings must be placed on the address side of the mailpiece unless specified in [221.1](#) and [325.1](#). Parcels containing mailable corrosive material must be marked as follows:

- a. For air transportation, a mailpiece containing a mailable corrosive material must bear the DOT square-on-point marking. The top and bottom portions of the square-on-point and the border forming the square-on-point must be black, and the center must be white or of a suitable contrasting background. The symbol “Y” must be black, located in the center of the square-on-point, and clearly visible. Mailpieces must also bear the appropriate approved DOT Class 8 hazardous material warning label, the identification number, and the proper shipping name. A properly completed shipper’s declaration for dangerous goods must be affixed to the outside of the mailpiece.
- b. For surface transportation, parcels containing mailable Class 8 materials must be plainly and durably marked on the address side with an approved DOT Limited Quantity surface mark (see [325.4](#)). Surface shipments bearing the Limited Quantity surface marking are not required to include the proper shipping name and identification number. A shipper’s declaration for dangerous goods is not required for mailable Class 8 corrosives sent via surface transportation.
- c. When the DOT square-on-point markings are used, markings must be durable, legible, and readily visible, and must be applied on at least one side or one end of the outer packaging. The border forming the

square-on-point must be at least 2 mm in width, and the minimum dimension of each side must be 100 mm, unless the package size requires a reduced size marking of no less than 50 mm on each side.

349 **Miscellaneous Hazardous Materials (Hazard Class 9)**

349.1 **Definition**

A miscellaneous hazardous material is a substance or article that presents a hazard during transportation, but does not meet the definition of any other hazard class. Examples of miscellaneous hazardous materials (not all of which are mailable) include solid dry ice, lithium batteries, magnetized materials, elevated temperature substances, environmentally hazardous substances, life-saving appliances (i.e., automobile air-bags, self-inflating life vests), and asbestos. Miscellaneous hazardous materials include:

- a. Any material that has an anesthetic, noxious, or other similar property that could cause extreme annoyance or discomfort to a flight crew member.
- b. Any elevated temperature material, hazardous substance, hazardous waste (other than Division 6.2 medical waste), or marine pollutant.

349.11 **Lithium Battery — Classifications:**

- a. *Lithium-ion cell or battery* means a rechargeable electrochemical cell or battery in which the positive and negative electrodes are both lithium compounds constructed with no metallic lithium in either electrode. These batteries are also referred to as secondary or rechargeable lithium cells or batteries, and are typically used in cell phones and laptop computers.
- b. *Lithium-ion polymer cell or battery* means a rechargeable cell or battery that uses lithium-ion chemistries and is regulated as a lithium-ion cell or battery.
- c. *Lithium metal cell or battery* means an electrochemical cell or battery utilizing lithium metal or lithium alloys as the anode. The lithium content of a lithium metal or lithium alloy cell or battery is measured when the cell or battery is in an undischarged state. The lithium content of a lithium metal or lithium alloy battery is the sum of the grams of lithium content contained in the component cells of the battery. These batteries are also referred to as primary or nonrechargeable lithium cells or batteries, and are often used in consumer products such as cameras and flashlights.
- d. *Button cell battery* means a small single cell round battery with the overall height less than the diameter. Button cells are used to power small portable electronic devices such as wrist watches, pocket calculators, and hearing aids, and are often installed in electronic devices as auxiliary power sources. For the purposes of mailability as button cell batteries, lithium metal batteries must contain no more than 0.3 gram of lithium content and lithium-ion batteries must be 2.7 watt-hours or less.

- e. *Lithium cell* means a single encased electrochemical unit with a single positive electrode (anode) and single negative electrode (cathode), which exhibits a voltage differential across its terminals. For the purpose of mailability, marking, and documentation requirements, a single cell lithium battery is classified as a lithium cell.
- f. *Lithium battery* means one or more lithium cells which are electrically connected together by a permanent means, including case, terminals, and markings.

349.12 **Lithium Battery — Definitions**

- a. *Equipment* means the device or apparatus for which the lithium cells or batteries will provide electrical power for its operation.
- b. *Lithium battery consignment* means one or more mailpieces containing lithium batteries, entered into USPS networks by one mailer or mail service provider within a single mailing or retail transaction, or included in the same manifest or shipping services file, and intended for delivery to a single consignee at a single destination address.
- c. *Short circuit* means a direct connection between positive and negative terminals of a cell or battery that provides an abnormally low resistance path for current flow.
- d. *Watt-hour (Wh)* means a unit of energy equivalent to one watt (1 W) of work acting for one hour (1 h) of time. The watt-hour rating of a lithium-ion cell or battery is determined by multiplying the rated capacity of a cell or battery in ampere-hours, by its nominal voltage. Therefore, watt-hour (Wh) = ampere-hour (Ah) x volts (V).

349.2 **Mailability**

- a. *International Mail.* All miscellaneous hazardous materials are prohibited, except for certain magnetized materials as permitted in [349.242a](#) and IMM 136.1g, and small consumer-type lithium batteries (installed in the equipment they operate) as permitted in [622.5](#) and IMM 135.6.
- b. *Domestic Mail.* A miscellaneous hazardous material that can qualify as a mailable air-eligible consumer commodity material (ID8000) when intended for air transportation, or limited quantity surface material when intended for surface transportation, is permitted in domestic mail, subject to the applicable 49 CFR requirements. Only certain materials within Classes 2, 3, 6.1, and 9 are mailable by air transportation; mailpieces including eligible quantities of these materials must be marked with the proper shipping name “Consumer Commodity.” Additionally, lithium batteries, dry ice, and magnetized materials are permitted within the specified limits provided in [349.221](#), [349.222](#), [349.23](#), and [349.24](#).

349.21 **Nonmailable Class 9 Materials**

The following materials are prohibited:

- a. All Class 9 materials that cannot qualify as a Limited Quantity air or Limited Quantity ground material, except for lithium batteries, dry ice, and magnetized materials.

- b. All magnetized materials that have a measurable magnetic field strength greater than 0.00525 gauss at 15 feet.
- c. For air transportation, all magnetized materials that can cause a compass deviation at a distance of 7 feet or more.
- d. In domestic mail via air transportation, dry ice in quantities exceeding 5 pounds per mailpiece.
- e. All lithium batteries in international mail, unless they are within the specified limits and only when properly installed in the equipment they operate.
- f. All lithium batteries in domestic air transportation, unless they are within the specified limits and only when properly installed in, or packed with, the equipment they are intended to operate.

349.22 **Mailable Class 9 Materials**

349.221 **Lithium Metal (Nonrechargeable) Cells and Batteries — Domestic**

For domestic mailings only, small consumer-type lithium metal cells or batteries (also called primary lithium cells or batteries) like those used to power cameras and flashlights are mailable domestically under the following conditions. See [622](#) or IMM 136 when mailing batteries internationally or to APO/FPO/DPO destinations.

- a. *General.* The following restrictions apply to the mailability of all lithium metal (or lithium alloy) cells and batteries:
 - (1) Each cell must contain no more than 1.0 gram (g) of lithium content per cell.
 - (2) Each battery must contain no more than 2.0 g aggregate lithium content per battery.
 - (3) Each cell or battery must meet the requirements of each test in the UN Manual of Tests and Criteria, part III, and subsection 38.3 as referenced in DOT's hazardous materials regulation at 49 CFR 171.7.
 - (4) All outer packages must have a complete delivery and return address.
 - (5) All packaging must meet applicable requirements specified in 49 CFR 173.185. Except for mailpieces containing button cell batteries properly installed in the equipment they are intended to operate, mailpieces containing lithium metal batteries must be rigid, sealed, and of adequate size, so the mark can be affixed to the address side without the mark being folded. The use of padded and poly bags as outer packaging is permitted only when the mailpieces contain button cell batteries meeting the classification criteria in 349.11d, the batteries are properly installed in the equipment they are intended to operate, and the batteries are afforded adequate protection by that equipment.
 - (6) Except for mailpieces containing button cell batteries installed in equipment (including circuit boards), or no more than 4 lithium metal cells or 2 lithium metal batteries installed in the equipment they operate, mailpieces containing lithium metal batteries must bear a DOT-approved lithium battery mark, as specified in

49 CFR 173.185(c)(3)(i) and Exhibit 325.2a, applied to the address side of the mailpiece. Marks must not be applied in such a manner that parts of the mark appear on different sides of the mailpiece.

- (7) The mark must indicate UN3090 for lithium metal cells or batteries. UN3091 must be indicated where the lithium cells or batteries are contained in or packed with the equipment they are intended to operate. The mark must also include a telephone number for those who need to obtain additional information.
- b. *Installed in Equipment.* The following additional restrictions apply to the mailing of lithium metal cells or batteries properly installed in the equipment they operate:
- (1) The batteries installed in the equipment must be protected from damage and short circuit.
 - (2) The equipment must be equipped with an effective means of preventing it from being inadvertently turned on or activated.
 - (3) The equipment must be cushioned to prevent movement or damage and, unless excepted under 349.221a(5), must be contained in rigid outer packaging, sealed and strong enough to prevent crushing of the package or exposure of the contents during normal handling in the mail.
 - (4) For lithium metal cells and batteries containing no more than 0.3 gram of lithium content, no mailpiece may exceed 2.5 kilograms (5.5 pounds). There is no maximum number of cells or batteries per mailpiece.
 - (5) For lithium metal cells containing more than 0.3 gram but no more than 1.0 gram of lithium content, and batteries containing more than 0.3 gram but no more than 2.0 grams of lithium content, no mailpiece may exceed 5 kilograms (11 pounds). Each mailpiece may contain a maximum of 8 cells or 2 batteries, with no more than 1.0 gram of lithium content per cell or 2.0 grams of lithium content per battery.
 - (6) When required or optionally applied, mailpieces must display a DOT-approved lithium battery mark on the address side.
 - (7) DOT-approved lithium battery markings must be applied to all mailpieces when there are more than two mailpieces in a single consignment as defined in 349.12b.
- c. *Mailed With Equipment.* The following additional restrictions apply to the mailing of lithium metal cells or batteries shipped with (but not installed in) the device or equipment being mailed:
- (1) The shipment cannot contain more batteries than the number needed to operate the device.
 - (2) The lithium metal cells and batteries must be packaged separately and cushioned to prevent movement or damage.
 - (3) The shipment must be cushioned to prevent movement or damage, and must be contained in rigid outer packaging, sealed

- and strong enough to prevent crushing of the package or exposure of the contents during normal handling in the mail.
- (4) For lithium metal cells and batteries containing no more than 0.3 gram of lithium content, no mailpiece may exceed 2.5 kilograms (5.5 pounds). There is no maximum number of cells or batteries per mailpiece.
 - (5) For lithium metal cells containing more than 0.3 gram but no more than 1.0 gram of lithium content, and batteries containing more than 0.3 gram but no more than 2.0 grams of lithium content, no mailpiece may exceed 5 kilograms (11 pounds). Each mailpiece may contain a maximum of 8 cells or 2 batteries, with no more than 1.0 gram of lithium content per cell or 2.0 grams of lithium content per battery.
 - (6) Mailpieces must display a DOT-approved lithium battery mark on the address side.
- d. *Mailed Without Equipment.* The following additional restrictions apply to the mailing of lithium metal cells or batteries without equipment (individual batteries):
- (1) The lithium metal cells and batteries must be mailed in “the originally sealed packaging.”
 - (2) The sealed packages of batteries must be separated and cushioned to prevent short circuit, movement, or damage.
 - (3) The shipment must be cushioned to prevent movement or damage, and must be contained in rigid outer packaging, sealed and strong enough to prevent crushing of the package or exposure of the contents during normal handling in the mail.
 - (4) Mailpieces must be sent by surface transportation only.
 - (5) Mailpieces must display a DOT-approved lithium battery mark on the address side, in addition to the text “Surface Mail Only, Primary Lithium Batteries — Forbidden for Transportation Aboard Passenger Aircraft” or “Surface Mail Only, Lithium Metal Batteries — Forbidden for Transportation Aboard Passenger Aircraft.”
 - (6) The mailpiece must not exceed 5 pounds.

349.222 **Lithium-ion (Rechargeable) Cells and Batteries — Domestic**

Small consumer-type lithium-ion cells and batteries (also called secondary lithium cells or batteries) like those used to power cell phones and laptop computers are only mailable domestically under the following conditions. See [622](#) or IMM 135.6 when mailing batteries internationally or to and from APO/FPO/DPO destinations.

- a. *General.* The following additional restrictions apply to the mailability of all secondary lithium-ion or lithium polymer cells and batteries:
- (1) The watt-hour rating must not exceed 20 Wh per cell.
 - (2) The watt-hour rating must not exceed 100 Wh per battery.

- (3) Each battery must bear the “Watt-hour” or “Wh” marking on the battery to determine if it is within the limits defined in items 1 and 2.
 - (4) Each cell or battery must meet the requirements of each test in the UN Manual of Tests and Criteria, part III, and subsection 38.3 as referenced in DOT’s hazardous materials regulation at 49 CFR 171.7.
 - (5) All outer packages must have a complete delivery and return address.
 - (6) All packaging must meet applicable requirements specified in 49 CFR 173.185. Except for mailpieces containing button cell batteries properly installed in the equipment they are intended to operate, mailpieces containing lithium-ion batteries must be rigid, sealed, and of adequate size, so the mark can be affixed to the address side without the mark being folded. The use of padded and poly bags as outer packaging is permitted only when the mailpieces contain button cell batteries meeting the classification criteria in 349.11d, the batteries are properly installed in the equipment they are intended to operate, and the batteries are afforded adequate protection by that equipment.
 - (7) Except for mailpieces containing button cell batteries installed in equipment (including circuit boards), or no more than 4 lithium-ion cells or 2 lithium-ion batteries installed in the equipment they operate, mailpieces containing lithium-ion batteries must bear a DOT-approved lithium battery mark, as specified in 49 CFR 173.185(c)(3)(i) and Exhibit 325.2a, applied to the address side of the mailpiece. Marks must not be applied in such a manner that parts of the mark appear on different sides of the mailpiece. Where the lithium cells or batteries are shipped separately from equipment, the mark must indicate UN3480. Where the lithium cells or batteries are contained in, or packed with, equipment, UN3481 must be indicated. The mark must also include a telephone number for those who need to obtain additional information.
- b. *Installed in Equipment.* The following additional restrictions apply to the mailing of lithium-ion cells or batteries properly installed in equipment they operate:
- (1) The batteries installed in the equipment must be protected from damage and short circuit.
 - (2) The equipment must be equipped with an effective means of preventing it from being inadvertently turned on or activated.
 - (3) The equipment must be cushioned to prevent movement or damage and, unless excepted under 349.222a(6), must be contained in rigid outer packaging, sealed and strong enough to prevent crushing of the package or exposure of the contents during normal handling in the mail.

- (4) For lithium-ion cells and batteries with a watt-hour rating of not more than 2.7 Wh, no mailpiece may exceed 2.5 kilograms (5.5 pounds). There is no maximum number of cells or batteries per mailpiece.
 - (5) For lithium-ion cells with a watt-hour rating of not more than 20 Wh, and batteries with a watt-hour rating of not more than 100 Wh, each mailpiece must contain no more than 8 cells or 2 batteries. Each cell must have a watt-hour rating of no more than 20 Wh, and each battery must have a watt-hour of no more than 100 Wh.
 - (6) When required or optionally applied, mailpieces must display a DOT-approved lithium battery mark on the address side.
 - (7) DOT-approved lithium battery markings must be applied to all mailpieces when there are more than two mailpieces in a single consignment as defined in 349.12b.
- c. *Mailed With Equipment.* The following additional restrictions apply to the mailing of lithium-ion cells or batteries shipped with (but not installed in) the device or equipment being mailed:
- (1) For lithium-ion cells and batteries with a watt-hour rating of not more than 2.7 Wh, no mailpiece may exceed 2.5 kilograms (5.5 pounds). There is no maximum number of cells or batteries per mailpiece.
 - (2) For lithium-ion cells with a watt-hour rating of not more than 20 Wh, and batteries with a watt-hour rating of not more than 100 Wh, each mailpiece must contain no more than 8 cells or 2 batteries. Each cell must have a watt-hour rating of no more than 20 Wh, and each battery must have a watt-hour of no more than 100 Wh.
 - (3) The shipment must be cushioned to prevent movement or damage, and must be contained in rigid outer packaging, sealed and strong enough to prevent crushing of the package or exposure of the contents during normal handling in the mail.
 - (4) Mailpieces must display a DOT-approved lithium battery mark on the address side.
- d. *Mailed Without Equipment.* The following additional restrictions apply to the mailing of lithium-ion cells or batteries without equipment (individual batteries):
- (1) The lithium-ion cells and batteries must be mailed in “the originally sealed packaging.”
 - (2) The sealed packages of batteries must be separated and cushioned to prevent short circuit, movement, or damage.
 - (3) The shipment must be cushioned to prevent movement or damage, and must be contained in rigid outer packaging, sealed and strong enough to prevent crushing of the package or exposure of the contents during normal handling in the mail.

- (4) Unless both mailed from, and intended for delivery to, the state of Alaska under 349.222d(7), mailpieces must be sent by surface transportation only.
- (5) The mailpiece must not exceed 5 pounds.
- (6) Mailpieces must display a DOT-approved lithium battery mark on the address side, in addition to the text “Surface Mail Only, Secondary Lithium Batteries — Forbidden for Transportation Aboard Passenger Aircraft” or “Surface Mail Only, Lithium-ion Batteries — Forbidden for Transportation Aboard Passenger Aircraft.”
- (7) Cells having a watt-hour rating of not more than 20 Wh, and batteries having a watt-hour rating of not more than 100 Wh may be mailed via air transportation only when both mailed from, and intended for delivery within, the state of Alaska. Each mailpiece must contain no more than 8 cells or 2 batteries.
- (8) Mailpieces must display a DOT-approved lithium battery mark on the address side.

Exhibit 349.222

Domestic Lithium Battery Mailability

| | Surface Transportation | Air Transportation | Mailpiece Limitations¹ |
|--|---|---------------------------|---|
| Lithium Metal or Lithium Alloy Batteries^{2, 3} | | | |
| <i>Small, non-rechargeable, consumer-type batteries</i> | | | |
| Contained in (properly installed in equipment) | Mailable | Mailable | 8 cells or 2 batteries 11lbs. |
| Packed with equipment, but not installed in the equipment | Mailable | Mailable | 8 cells or 2 batteries 11lbs. |
| Without the equipment they operate (individual batteries in originally sealed packaging) | Mailable | Prohibited | 5 lbs. |
| Lithium-ion or Lithium Polymer Batteries^{4, 5} | | | |
| <i>Small, rechargeable, consumer-type batteries</i> | | | |
| Contained in (properly installed in equipment) | Mailable | Mailable | 8 cells or 2 batteries |
| Packed with equipment, but not installed in the equipment | Mailable | Mailable | 8 cells or 2 batteries |
| Without the equipment they operate (individual batteries in originally sealed packaging) | Mailable | Prohibited | 5 lbs. |
| Without the equipment they operate (individual batteries in originally sealed packaging) (Intra-Alaska only) | * | Mailable | 8 cells or 2 batteries |
| Very Small Lithium Metal or Lithium-ion Batteries^{6, 7} | | | |
| <i>Exception for very small consumer-type batteries in USPS air transportation</i> | | | |
| Contained in (properly installed in equipment) | Mailable | Mailable | No limit on cells/ batteries 5.5 pounds |
| Packed with equipment, but not installed in the equipment | Mailable | Mailable | No limit on cells/ batteries 5.5 pounds |
| Damaged/Recalled Batteries | Prohibited, unless approved by the manager, Product Classification. | | |

1. When a mailpiece limitation of 8 cells or 2 batteries is applicable, a mailpiece may contain either 8 cells or 2 batteries, not both.
2. Each cell must not contain more than 1g lithium content.
3. Each battery must not contain more than 2g aggregate lithium content.
4. Each cell must not exceed more than 20 Wh (watt-hour rating).
5. Each battery must not exceed 100 Wh.
6. Each lithium metal or lithium alloy cell or battery must not exceed 0.3 gram of lithium content.
7. Each lithium-ion or lithium polymer cell or battery must not exceed 2.7 Wh.

349.23 Dry Ice**349.231 General**

Dry ice is primarily used to keep other items cool. The items being cooled can be either mailable hazardous materials or nonhazardous items, such as medical specimens or foods.

349.232 Characteristics and Precautions

Dry ice (carbon dioxide solid) is produced by expanding liquid carbon dioxide to vapor and compacting the material into blocks. When dry ice converts (dissipates) to a gaseous form, it takes in heat from its surroundings. The

resulting gas is heavier than air and can cause suffocation in confined areas as air is displaced. When dry ice is enclosed in a thick metal or other restrictive type of container, internal pressure builds up and could cause the container to rupture or explode. Mailpieces containing dry ice must be handled with care because its very low temperature (about -110°F or -79°C) can cause severe burns to skin upon direct contact.

349.233 **Dry Ice Mailability**

Dry ice is permitted to be mailed when it is used as a refrigerant to cool the content of a mailable hazardous or nonhazardous material. Packages containing dry ice must be packed in containers that permit the release of carbon dioxide gas and conform to 49 CFR 173.217 and 175.10(a)(10). Mailpieces containing dry ice are subject to the following conditions, as applicable:

- a. *International Mail.* Dry ice is prohibited.
- b. *Domestic Mail via Air Transportation.* Dry ice is permitted in quantities of up to 5 pounds per mailpiece. Mailpieces containing dry ice are subject to the conditions for Packaging Instruction 9A in Appendix [C](#), as applicable.
- c. *Domestic Mail via Surface Transportation.* A mailpiece sent via surface transportation may contain more than 5 pounds of dry ice. Mailpiece preparation is subject to the conditions for Packaging Instruction 9A in Appendix [C](#).

Note: A mailpiece that is prepared for surface transportation *must not, under any circumstances*, be routed via air transportation.

349.24 **Magnetized Materials**

A magnetized material is not classified within any of the nine hazard classes. Such material is regulated as a hazardous material only if offered for carriage on air transportation and when it has a magnetic field strength capable of causing the deviation of aircraft instruments.

349.241 **Definition**

A magnetized material is any article that has a magnetic field strength capable of causing the deviation of aircraft instruments. A magnetized material is regulated as a hazardous material when it is presented for air transportation and has a measurable magnetic field strength greater than 0.00525 gauss at 15 feet. Magnetized materials include magnets and magnetized devices such as magnetrons and light meters of sufficient strength to possibly cause erroneous aircraft compass readings. If the maximum field strength observed at a distance of 7 feet is less than 0.002 gauss or there is no significant compass deflection (less than 0.5 degree), the article is not restricted as a magnetized material.

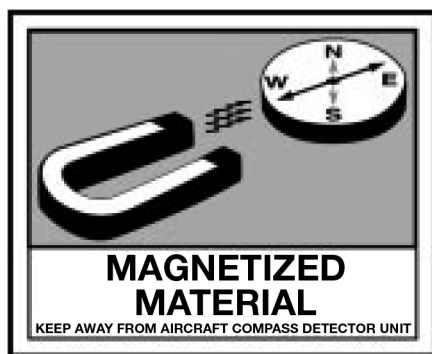
349.242 **Mailability**

Magnetized materials that have a magnetic field strength of 0.002 gauss or more at a distance of 7 feet from any point on the surface of the outer packaging are mailable via air transportation if properly packaged. Magnetized materials that have a field strength greater than 0.00525 gauss at 15 feet are nonmailable under any conditions. The following requirements also apply:

- a. *International Mail.* Only non-regulated magnetized materials that have a magnetic field strength less than 0.002 gauss at a distance of 7 feet may be sent internationally. Magnetized materials which are regulated are prohibited. See [622.4](#) or IMM 136.1.
- b. *Domestic Mail via Air Transportation.* Magnetized materials that have a magnetic field strength greater than 0.00525 gauss at 15 feet are prohibited. A magnetic field strength less than 0.002 gauss at a distance of 7 feet is not regulated. Mailpiece preparation is subject to the conditions in Packaging Instruction 9B in Appendix [C](#). The address side of the outer packaging must bear the magnetized material warning label shown in [Exhibit 349.242b](#) and a shipping paper is required, if regulated.
- c. *Domestic Mail via Surface Transportation.* Magnetized material is not regulated as a hazardous material when transported via surface transportation.

Exhibit 349.242b

Warning Label for Magnetized Materials



349.3 Packaging

For mailable Class 9 materials, the following packaging requirements as detailed in the Packaging Instructions in Appendix [C](#) apply:

- a. Packaging Instruction 9A must be followed for mailable quantities of dry ice.
- b. Packaging Instruction 9B must be followed for mailable types of magnetized materials.
- c. Packaging Instruction 9C must be followed for Class 9 miscellaneous hazardous materials that can qualify as air-eligible consumer commodity material (ID8000) when intended for air transportation or a Limited Quantity ground material when intended for surface transportation.
- d. Packaging Instruction 9D must be followed for lithium and lithium-ion cells and batteries.

349.4 Marking and Documentation

Parcels containing mailable Class 9 material must be marked as follows:

- a. For air transportation, a mailpiece Class 9 material must bear the DOT square-on-point marking. The top and bottom portions of the square-on-point and the border forming the square-on-point must be black, and the center must be white or of a suitable contrasting background.

The symbol “Y” must be black, located in the center of the square-on-point, and clearly visible. Mailpieces intended for transport by air and containing eligible limited quantity material of DOT Classes 2, 3, and 6.1, or eligible hazard Class 9 limited quantity material categorized in UN3077, UN3082, UN3175, UN3334, or UN3335, must be marked with the proper shipping name “Consumer Commodity” and identification number “ID8000.” Each mailpiece must also display an approved DOT Class 9 hazardous material warning label (see [Exhibit 325.3b](#)). A shipper’s declaration for dangerous goods that is prepared in triplicate must be affixed to the outside of the mailpiece.

- b. For surface transportation, parcels containing mailable Class 9 materials must be plainly and durably marked on the address side with an approved DOT Limited Quantity ground marking unless specified in [221.1](#) and [325.1](#) (see [325.4](#)). Surface shipments bearing the Limited Quantity ground marking are not required to include the proper shipping name and identification number.
- c. When the DOT square-on-point markings are used, markings must be durable, legible, and readily visible, and must be applied on at least one side or one end of the outer packaging. The border forming the square-on-point must be at least 2 mm in width, and the minimum dimension of each side must be 100 mm, unless the package size requires a reduced size marking of no less than 50 mm on each side.
- d. The specific marking and documentation requirements for dry ice, magnetized materials, and lithium batteries are specified in Packaging Instruction 9A, Packaging Instruction 9B, and Packaging Instruction 9D in Appendix C, as applicable.

4 Restricted Matter

41 General

411 Definition

Restricted matter includes articles on which mailing restrictions have been imposed for reasons other than risk of harm to persons or property involved in moving the mail. Motor vehicle master keys and intoxicating liquors are examples of restricted items.

412 Mailer Responsibility

The mailer is responsible for ensuring that all Postal Service requirements, as well as all federal and state laws and local ordinances that apply to the shipment of an article of restricted matter, have been met.

413 Rulings

Where doubt exists about mailability of any article that is considered to be restricted matter, a request for a ruling may be made to the local postmaster (see [215.3](#)).

When the qualification of an addressee to receive restricted matter within the conditions in this chapter is in question, a Postmaster may require the mailer or addressee to furnish a written explanation of the addressee's eligibility and/or the item's mailability. If the explanation is not satisfactory or when uncertainty remains, the postmaster may forward the explanation along with a statement of the facts to the PCSC for a ruling.

414 Nonmailable Matter Found in the Mails

All nonmailable articles of restricted matter discovered in the mailstream must immediately be reported in accordance with the provisions in the *Postal Operations Manual* (POM) 139.117 or 139.118, as appropriate.

42 Intoxicating Liquors

421 Definition

Intoxicating liquors are drinkable beverages that have 0.5 percent or more alcoholic content by weight and are taxable under Chapter 51 of the Internal Revenue Service (IRS) Code.

422 Mailability**422.1 Nonmailable Matter****422.11 Intoxicating Liquors**

Intoxicating liquors having 0.5 percent or more alcoholic content are nonmailable. Taxable liquors (as defined by Chapter 51, Internal Revenue Service Code) with 3.2 percent or less alcohol, including those obtained under a prescription or as a collector's item, also are nonmailable. The prohibition of the mailing of intoxicating liquors is contained in federal law (18 U.S.C. 1716).

422.12 Promotional Materials

Advertising, promotional, or sales matter that solicits or induces the mailing of intoxicating liquors also is nonmailable. See DMM 601.7.4.1.

422.2 Mailable Liquors**422.21 Products Not Categorized As Intoxicating Liquors**

A product containing an intoxicating liquor is mailable if it conforms to the applicable requirements of the IRS and the Food and Drug Administration (FDA), and if it is not a taxable alcoholic beverage, poisonous, or flammable. The following are examples of products that may be mailable:

- a. Cold remedies.
- b. Cooking wine.
- c. Mouthwash.

422.22 Exempt Mailings Between Federal and State Agencies

Intoxicating liquor is exempt from the prohibition against mailing when it is sent between employees of federal or state agencies who have an official use for the liquor, such as for testing purposes. This exemption is based on the intent of the law to prevent liquor from being transported to prohibited jurisdictions for consumption and to ensure that all proper tax revenues are paid.

423 Packaging and Marking**423.1 General**

All exempt intoxicating liquors must be sent via Registered Mail service and must meet the packaging requirements for liquids in DMM 601.3.4.

423.2 Denatured Flammable or Combustible Liquor

There are no postal requirements to denature the contents (i.e., to change the nature or natural qualities) of intoxicating liquor. However, if contents are denatured through the use of such elements as sodium bisulfate (a corrosive) or mercuric chloride (a poison), the substances must meet the mailability requirements in Chapter [3](#) for a Class 8 corrosive material or a Division 6.1 toxic substance, as appropriate. If the contents are flammable or combustible, the material must meet the requirements for a Class 3 flammable or combustible liquid in Chapter [3](#).

43 Firearms

431 Definitions

431.1 Firearm

The following definitions apply:

- a. Firearm means any device, including a starter gun, which will, or is designed to, or may readily be converted to, expel a projectile by the action of an explosive; the frame or receiver of any such weapon; any firearm muffler or firearm silencer; or any destructive device; but the term shall not include antique firearms (except antique firearms meeting the description of a handgun or of a firearm capable of being concealed on a person).
- b. Firearm frame or receiver is the part of a firearm which provides housing for the hammer, bolt or breechblock, and firing mechanism, and which is usually threaded at its forward portion to receive the barrel. Frames and receivers usually (but not always) include the firearm serial number and are usually considered to be the regulated component of a firearm.

431.2 Handguns

Pistols, revolvers, and other firearms capable of being concealed on the person (for example, short-barreled shotguns and short-barreled rifles) are defined as handguns. The following definitions apply:

- a. Handgun (including pistols and revolvers) means any firearm which has a short stock, and is designed to be held and fired by the use of a single hand and subject to [431.1](#), or a combination of parts from which a handgun can be assembled.
- b. Other firearms capable of being concealed on the person include, but are not limited to, short-barreled shotguns and short-barreled rifles.
- c. Short-barreled shotgun means a shotgun that has one or more barrels less than 18 inches long. The term short-barreled rifle means a rifle that has one or more barrels that are less than 16 inches long. These definitions include any weapon made from a shotgun or rifle, whether by alteration, modification, or otherwise, if such a weapon as modified has an overall length of less than 26 inches. A short-barreled shotgun or rifle of greater dimension may be regarded as nonmailable when it has characteristics to allow concealment on the person.

431.3 Antique Firearm

Antique firearm means any muzzle loading rifle/shotgun/pistol, which is designed to use black powder or a black powder substitute, and which cannot use fixed ammunition (except those that incorporate a firearm frame or receiver, any firearm which is converted into a muzzle loading weapon, or any muzzle loading weapon which can be readily converted to fire fixed ammunition by replacing the barrel, bolt, breechblock, or any combination

thereof); or any firearm (including those with a matchlock, flintlock, percussion cap, or similar type of ignition system) manufactured on or before 1898, or any replica thereof, if such replica:

- a. Is not designed or redesigned for using rimfire or conventional centerfire fixed ammunition.
- b. Uses rimfire or conventional centerfire fixed ammunition that is no longer manufactured in the United States and is not readily available in the ordinary channels of commercial trade.

431.4 **Rifles and Shotguns**

A rifle is a shoulder weapon having a barrel that is 16 inches or more in length. A shotgun is a shoulder weapon having a barrel that is 18 inches or more in length. Rifles and shotguns have an overall length of 26 inches or greater and cannot be concealed on a person.

431.5 **Federal Firearms Licensee (FFL)**

Federal Firearms licenses are issued by the Bureau of Alcohol, Tobacco, and Firearms (ATF), U.S. Department of the Treasury, under the Gun Control Act of 1968, and are defined as follows:

- a. Federal Firearms Licensee (FFL) manufacturer, dealer, or importer of firearms means a manufacturer, dealer, or importer duly licensed by the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) under Chapter 44, Title 18, United States Code (U.S.C.).
- b. Curio and relic collector means an individual licensed by ATF to transfer or receive only those firearms defined as curios or relics by ATF under Title 27, Code of Federal Regulations (CFR), section 478.11.

431.6 **Air Guns**

Air gun means a gun that fires a projectile by means of compressed air or other gas (including paintball and pellet guns).

432 **Mailability**

432.1 **General**

Mailers must comply with the Gun Control Act of 1968, all of the provisions of postal law in 18 U.S.C. 1715, and all other all federal and state regulations and local ordinances affecting the movement of firearms. The following also applies:

- a. The Postal Service may require the mailer to open parcels containing firearms or air guns or give written certification that the weapon is unloaded and not concealable.
- b. Short-barreled rifles or shotguns that can be concealed on the person are nonmailable.
- c. No markings of any kind that indicate the nature of the contents may be placed on the outside wrapper or container of any mailpiece containing firearms.

- d. Mailable matter must be properly and securely packaged within the general packaging requirements in DMM 601.1-7.
- e. Except for shipments between licensed dealers, manufacturers, or importers, all regulated firearms must be mailed using a USPS product or Extra Service that provides tracking and signature capture at delivery.

432.2 Handguns

Handguns and other firearms capable of being concealed on the person are nonmailable unless mailed between the parties listed in this section, after the filing of an affidavit or statement described in [432.22](#) or [432.24](#), and are subject to the following:

- a. Firearms meeting the definition of a handgun under [431.2](#) and the definition of curios or relics under 27 CFR 478.11 may be mailed between curio and relic collectors only when those firearms also meet the definition of an antique firearm under [431.3](#).
- b. Firearms meeting the definition of a handgun under [431.2](#), which are certified by the curator of a municipal, state, or federal museum that exhibits firearms to be curios or relics of museum interest, may be accepted for mailing between governmental museums without regard to the restrictions provided for handguns in [432.21](#) through [432.24](#) and [Exhibit 432.25](#).
- c. Air guns (see [431.6](#)) that do not fall within the definition of firearms under [431.1](#) and are capable of being concealed on a person are mailable, but must include Adult Signature service under DMM 503.8. Mailers must comply with all applicable state and local regulations.
- d. Parts of handguns are mailable, except for handgun frames, receivers or other parts or components regulated under Chapter 44, Title 18, U.S.C.
- e. Mailers are also subject to applicable restrictions by governments of a state, territory, or district.

432.21 Authorized Persons

Subject to [432.22](#), handguns may be mailed by a licensed manufacturer of firearms, a licensed dealer of firearms, a licensed importer of firearms, or an authorized agent of the federal government or the government of a state, territory, or district, *only* when addressed to a person in one of the following categories for use in the person's official duties, *and* upon filing the required affidavit or certificate:

- a. Officers of the Army, Coast Guard, Air Force, Navy, Marine Corps, or Organized Reserve Corps.
- b. Officers of the National Guard or militia of a state, territory, or district.
- c. Officers of the United States or of a state, territory, or district, whose official duty is to serve warrants of arrest or commitment.
- d. USPS employees authorized by the Chief Postal Inspector.
- e. Officers and employees of enforcement agencies of the United States.
- f. Watchmen engaged in guarding the property of the United States, a state, territory, or district.

- g. Purchasing agent or other designated member of agencies employing officers and employees included in [432.21c](#) through [e](#).

432.22 **Affidavit of Addressee**

Any person proposing to mail a handgun under [432.21](#) must file with the Postmaster, at the time of mailing, an affidavit signed by the addressee setting forth that the addressee is qualified to receive the firearm under a particular category of [432.21a](#) through [432.21g](#), and that the firearm is intended for the addressee's official use. The affidavit must also bear a certificate stating that the firearm is for the official duty use of the addressee, signed by one of the following, as appropriate:

- a. For officers of Armed Forces, by the commanding officer.
- b. For officers and employees of enforcement agencies, by the head of the agency employing the addressee to perform the official duty with which the firearm is to be used.
- c. For watchmen, by the chief clerk of the department, bureau, or independent branch of the government of the United States, the state, the territory, or the district by which the watchman is employed.
- d. For the purchasing agent or other designated member of enforcement agencies, by the head of such agency, that the firearm is to be used by an officer or employee included in [432.21c](#) through [432.21e](#).

432.23 **Manufacturers, Dealers, and Importers**

Handguns may also be mailed between licensed manufacturers of firearms, licensed dealers of firearms, and licensed importers of firearms in customary trade shipments, or for repairing or replacing parts.

432.24 **Certificate of Manufacturers, Dealers, and Importers**

A federal firearms licensee manufacturer, dealer, or importer need not file the affidavit under [432.22](#), but must file with the Postmaster a statement on PS Form 1508, *Statement by Shipper of Firearms*, signed by the mailer that he or she is a licensed manufacturer, dealer, or importer of firearms. The mailer must also state that the parcels containing handguns, or parts and components of handguns under [432.2d](#), are being mailed in customary trade shipments or contain such articles for repairing or replacing parts, and that to the best of their knowledge the addressees are licensed manufacturers, dealers, or importers of firearms. Registered Mail service is recommended. Postmasters may forward an unsatisfactory mailer statement to the PCSC for a ruling.

432.25 **Federal and Other Law Enforcement Agencies**

Handguns may be mailed without regard to [432.21](#) through [432.24](#) if the item is:

- a. Addressed to a scientific laboratory or crime detection bureau of any federal, state, or local law enforcement agency whose members are authorized to serve warrants of arrest or commitment.

- b. Sent by an authorized agent of the federal government as an official shipment to any qualified addressee in [432.21](#), or to a licensed manufacturer, dealer, or importer of firearms, or to a federal agency.

Exhibit 432.25

Mailability Requirements for Handguns

| Addressee | Affidavit or Certificate Requirements |
|---|---|
| Officer of Air Force, Army, Coast Guard, Marine Corps, Navy, or Organized Reserve Corps. | Affidavit signed by the addressee and certificate signed by the commanding officer. |
| Officer of National Guard or militia of a state, territory, or district. | Affidavit signed by the addressee and certificate signed by the commanding officer. |
| Officer of the federal government or a state, district, or territory whose official duty is to serve warrants of arrest or commitment.* | Affidavit signed by the addressee and certificate signed by the head of the agency employing the addressee. |
| Postal Service employees specifically authorized by the Chief Postal Inspector.* | Affidavit signed by the addressee and certificate signed by the head of the agency employing the addressee. |
| Officer or employee of a U.S. enforcement agency.* | Affidavit signed by the addressee and certificate signed by the head of the agency employing the addressee. |
| Purchasing agent or other designated member of an enforcement agency employing officers and personnel included in (*) above. | Affidavit signed by the addressee and certificate signed by the head of agency stating the firearm is to be used by an officer or employee included in addressee column marked with an (*). |
| Watchman engaged in guarding federal, state, district, or territory property. | Affidavit signed by the addressee and certificate signed by chief clerk of department, bureau, or independent branch of the government agency employing the addressee. |
| Licensed manufacturers, importers, and dealers of firearms. | Signed statement on PS Form 1508, <i>Statement by Shipper of Firearms</i> . The mailer must be a licensed manufacturer, importer, or dealer mailing to another licensed manufacturer, importer, or firearms dealer. |

432.3 Rifles and Shotguns

Except under [431.2](#), unloaded rifles and shotguns are mailable. Mailers must comply with the rules and regulations under 27 CFR, Part 478, as well as state and local laws. The mailer may be required by the USPS to establish, by opening the parcel or by written certification, that the rifle or shotgun is unloaded and not ineligible for mailing. The following conditions also apply:

- a. Subject to state, territory, or district regulations, rifles and shotguns may be mailed without restriction when intended for delivery within the same state of mailing. These items must:
- (1) Bear a "Return Service Requested" endorsement.
 - (2) Be mailed using a class of mail, product, or Extra Service that provides tracking and signature capture at delivery.
- b. A rifle or shotgun owned by a non-FFL may be mailed outside the owner's state of residence by the owner to himself or herself, in care of another person in the other state where he or she intends to hunt or engage in any other lawful activity. These mailpieces must:
- (1) Be addressed to the owner.
 - (2) Include the "in the care of" endorsement immediately preceding the name of the applicable temporary custodian.

- (3) Be opened by the rifle or shotgun owner only.
- (4) Be mailed using a class of mail, product, or Extra Service that provides tracking and signature capture at delivery.
- c. Mailing of rifles and shotguns between licensed FFL dealers, manufacturers, or importers are not restricted. The Postal Service recommends that these items be mailed using a class of mail, product, or Extra Service that provides tracking and signature capture at delivery.
- d. Rifles and shotguns may be mailed by a non-FFL owner domestically to a FFL dealer, manufacturer, or importer in any state. These items must be mailed using a class of mail, product, or Extra Service that provides tracking and signature capture at delivery.
- e. Except as described in [432.3a](#), licensed curio and relic collectors may mail firearms meeting the definition of curios or relics under 27 CFR 478.11 domestically to licensed FFL curio and relic collectors in any state. These items must be mailed using a class of mail, product, or Extra Service that provides tracking and signature capture at delivery.
- f. Firearms meeting the definition of a rifle or shotgun under [431.4](#) which are certified by the curator of a municipal, state, or federal museum, which exhibits firearms to be curios or relics of museum interest, may be accepted for mailing without restriction when mailed between governmental museums.
- g. Air guns (see [431.6](#)) that do not fall within the definition of firearms under [431.1a](#) are mailable. A shipment containing an air gun with a muzzle velocity of 400 or more feet per second (fps) must include an adult signature service under DMM 503.8. Mailers must additionally comply with all applicable state and local regulations.

432.4 **Indemnity Claims**

When indemnity claims pertaining to regulated firearms are filed for loss or damage to contents, claims will only be paid for complete loss under either of the following conditions:

- a. The regulated firearm has been lost, or
- b. When the mailer has provided reasonable estimates of the firearm's value and of repair cost from a reputable dealer, and the repair cost exceeds the declared and/or actual value of the firearm at the time of mailing.

433 **Legal Opinions on Mailing Firearms**

Postmasters are not authorized to give opinions on the legality of any shipment of firearms. Mailers requesting additional information should be referred to the ATF. Further advice and ATF contact information is available at <http://atf.gov/firearms/faq/licensing.html>.

434 Replica or Inert Explosive Devices

Replica or inert explosive devices that are not dangerous, but that bear a realistic appearance to explosive devices such as simulated grenades, are permitted in the mail when *all* of the following conditions are met:

- a. The package is presented by the mailer at a retail counter.
- b. Registered Mail service is used. (Registered Mail service is only available for items mailed as First-Class Mail or Priority Mail.)
- c. The address side of the package is labeled with “REPLICA EXPLOSIVE” using at least 20-point type or letters at least 1/4-inch high.

435 Nonmailable Firearms Found in the Mails

Nonmailable firearms discovered in the mailstream must be immediately reported to the Inspection Service in accordance with POM 139.117.

44 Knives and Sharp Instruments

441 Definitions**441.1 General**

Sharp instruments include all sharp-pointed or sharp-edged implements such as knives, tools, ice picks, razor blades, stilettos, or similar devices. When uncertain about the mailability of a sharp instrument or a switchblade knife, a ruling may be requested from the local postmaster (see [215.3](#)).

441.2 Switchblade Knife

A switchblade knife has a blade that opens automatically by hand pressure applied to a button or other device in the handle, or by operation of inertia, gravity, or both.

442 Mailability

A switchblade knife, as defined in [441.2](#), is mailable only to the following categories of addressees:

- a. Certain designated supply or procurement officers and employees ordering, procuring, or purchasing them for use in connection with their respective governments or organizations, such as:
 - (1) Civilian or armed forces supply or procurement officers, and employees of the federal government.
 - (2) Supply or procurement officers of the National Guard, the Air National Guard, or the militia of a state, territory, or the District of Columbia.
 - (3) Supply or procurement officers or employees of the municipal government of the District of Columbia, or of the government of any state or territory, or of any county, city, or other political subdivision of a state or territory.

Note: Addressee Identification. Before delivering a shipment (or parcel) that contains an article or articles described in [441.2](#), a USPS employee may require that the recipient identify himself or herself as being in one of the categories in [442a](#).

- b. Manufacturers or bona fide dealers of such knives in connection with a shipment made to an address in one of the above categories.

443 Packaging and Marking

443.1 General

All sharp-pointed or sharp-edged instruments such as knives, tools, ice picks, razor blades, etc., that are otherwise mailable, must be securely packaged in a strong container. An inner and outer packaging container is recommended. Sufficient cushioning material must be used to protect the sharp points and edges from cutting through the outer packaging during normal Postal Service handling.

443.2 Marking

No marking of any kind that indicates the nature of the contents may be placed on the outside of any mailpiece containing a switchblade knife.

444 Nonmailable Knives in the Mails

Nonmailable knives or sharp instruments discovered in the mailstream must be reported to the Inspection Service in accordance with POM 139.117.

45 Other Restricted Materials

451 Liquids, Powders, and Odor-Producing Materials

451.1 Definitions

A *liquid* is any substance that flows readily and assumes the form of the container, but retains an independent volume. For the purposes of mailability, a liquid may be a cream or paste or any other nonhazardous substance (except a gas) that may liquify under existing conditions.

An *odor* is any matter that is a source of an obnoxious odor.

451.2 Mailability

- a. Liquids and powders that are nonhazardous (i.e., not regulated as hazardous materials) are mailable provided they are properly packaged as specified in [451.3](#).
- b. Any matter that is a source of an obnoxious odor is nonmailable.

451.21 Restrictions

Liquids and powders that are corrosive, explosive, flammable, toxic, or otherwise hazardous are subject to the mailing conditions for hazardous materials in Chapter [3](#), as applicable.

451.22 Cremated Remains

The following applies when mailing cremated remains (ashes):

a. *Domestic:*

- (1) Permitted for cremated remains (human or animal) only when sent via Priority Mail Express service. The item must be packaged as required in [451.3b](#) and Packaging Instruction 10C.
- (2) The Priority Mail Express mailpiece (USPS-produced or customer supplied) must be marked with Label 139, *Cremated Remains*, affixed to all sides (including top and bottom), or a mailer may use the special Priority Mail Express cremated remains branded box (BOX-CRE) available on usps.com.
- (3) Mailers may have a shipping label printed and affixed at a Post Office location or mailers may generate single-ply Priority Mail Express labels through Click-N-Ship or other USPS-approved methods. Mailer generated labels must bear an Intelligent Mail package barcode (IMpb) with the proper cremated remains service type code and include the proper Extra Services code in the Shipping Services File (see Publication 199 on PostalPro at postalpro.usps.com).
- (4) Priority Mail Express mailpieces containing cremated remains are limited to additional insurance and return receipt extra services.

b. *International:*

- (1) When permitted by the destination country, cremated remains (human or animal) may only be sent via Priority Mail Express International service. Mailers must verify that the destination country accepts Priority Mail Express International and cremated remains before mailing. The contents must be indicated on the applicable customs declaration form. The item must be packaged as required in [451.3b](#) and Packaging Instruction 10C.
- (2) The Priority Mail Express International mailpiece (USPS-produced or customer supplied) must be marked with a Label 139, *Cremated Remains*, affixed to all sides (including top and bottom), or a mailer may use the special Priority Mail Express cremated remains branded box (BOX-CRE) available on usps.com.

451.3 Packaging and Marking

The following conditions apply:

- a. *Liquids.* Nonhazardous liquids, creams, and pastes, particularly those in 1-gallon paint cans with only friction-top closures (push-down tops), are often a source of damage to other mail and postal equipment. The proper packaging of liquids is critical to ensuring the integrity of the mailpiece during handling. Mailers must mark the outer container of a mailpiece containing liquid to indicate the nature of the contents, and include orientation arrows in accordance with [226](#). All liquids are

subject to the general packaging requirements in DMM 601.3.4 and the following:

- (1) Containers having friction-top closures are not acceptable by themselves. Such containers must be packed within a strong and securely sealed outer packaging.
 - (2) The use of locking rings or similar devices is encouraged when mailing containers with friction-top closures (push-down tops).
 - (3) Screw caps with a minimum of one and one-half turns, soldering clips, or other effective means must be used to ensure a secure closure.
 - (4) All nonmetal containers of liquid more than 4 ounces, including plastic containers, and metal containers with friction top closures, must be triple-packaged, and include absorbent material capable of absorbing all of the liquid in the container(s) in case of breakage, a leakproof secondary container, such as a watertight can or plastic bag surrounding the primary container(s), and an outer mailing container that is securely sealed, strong enough to protect the contents, and durable enough to withstand normal processing in Postal Service networks.
 - (5) Steel pails and drums with carrying handles and positive closures (e.g., locking rings or recessed spouts under screw-cap closures) may be accepted without additional packaging.
 - (6) As an alternative to 451.3a(4) above, mailers may use containers certified by the International Safe Transit Association (ISTA) to have passed ISTA's Test Procedure 3A. Mailers must, upon request, provide written test results verifying that sample mailpieces passed each test outlined in the standard and that no liquids were released.
- b. *Powders and Cremated Remains.* Dry materials that could cause damage, discomfort, destruction, or soiling upon escape (leakage) must be packed in siftproof containers or other containers that are sealed in durable siftproof outer containers.

452 **Motor Vehicle Master Keys and Locksmithing Devices**

452.1 **Definitions**

452.11 **Motor Vehicle Master Keys**

A *motor vehicle master key* is any of the following:

- a. Motor vehicle master keys, as defined in [452.11](#), and any advertisement for the sale of such items, are nonmailable unless sent to any of the following categories of addressees:
- b. The key (or an exact duplicate) furnished with a replacement lock.

- c. Any key or manipulation device designed to operate two or more motor vehicle ignition, door, or trunk locks of different combinations, including any pattern, impression, or mold from which a master key or manipulation device can be made (18 U.S.C. 1716 and 39 U.S.C. 3002).

452.12 **Locksmithing Devices**

A locksmithing device is any of the following:

- a. A device or tool (other than a key) designed to manipulate the tumblers in a lock into the unlocked position through the keyway of such lock.
- b. A device or tool (other than a key or a device or tool under [452.12a](#)) designed for bypassing a lock or similar security device, or for opening it by a method normally not used by consumers to open such locks or security devices.
- c. A device or tool designed for making an impression of a key or similar security device in order to duplicate such key or device.

452.2 **Mailability**

The following conditions apply:

- a. Motor vehicle master keys, as defined in [452.11](#), and any advertisement for the sale of such items, are nonmailable unless sent to any of the following categories of addressees:
 - (1) Lock manufacturers.
 - (2) Professional locksmiths.
 - (3) Motor vehicle manufacturers or dealers.
 - (4) Federal, state, or local government agencies.
- b. Locksmithing devices, as defined in [452.11](#), are nonmailable except when sent to any of the following categories of addressees:
 - (1) Lock manufacturers or distributors.
 - (2) Bona fide locksmiths.
 - (3) Bona fide reposseors.
 - (4) Motor vehicle manufacturers or dealers.
 - (5) Bona fide automotive repair shops or businesses.

452.3 **Packaging and Marking**

No marking of any kind that indicates the nature of the contents may be placed on the outer wrapper or packaging of any mailpiece containing motor vehicle master keys or locksmithing devices. Mailable matter must be properly and securely packaged within the general requirements in DMM 601.1-7.

452.4 **Nonmailable Matter Found in the Mails**

All nonmailable motor vehicle master keys and locksmithing devices discovered in the mailstream must be reported in accordance with POM 139.117.

453 **Controlled Substances and Drugs**

453.1 **Definitions**

453.11 **Controlled Substances**

A controlled substance is any anabolic steroid, narcotic, hallucinogenic, stimulant, or depressant drug identified in Schedules I through V of the Controlled Substances Act in 21 U.S.C. 801 and the implementing regulations in 21 CFR 1300.

Controlled substances include poisons, compositions containing poisons, poisonous drugs and medicines, or materials that may kill or injure within the intent and meaning of 18 U.S.C. 1716.

453.12 **Drugs**

The term “drug” refers to:

- a. *Prescription drugs* which are licensed medicines that require a written order by a medical doctor or pharmacist before they can be obtained. Certain poisonous (toxic) drugs and medicines may be subject to the requirements for Division 6.1 materials in Chapter [3](#).
- b. *Over-the-counter drugs* which are medicines that can be obtained without a prescription. This includes patent medicines and related items such as aspirin, antiseptics, cold remedies, diet pills, and cosmetic medicines that do not contain a controlled substance and are not poisonous drugs or medicines.

453.13 **Drug Paraphernalia**

The term “drug paraphernalia” refers to any equipment, product, or material primarily intended or designed for use in manufacturing, compounding, converting, concealing, producing, processing, preparing, injecting, ingesting, inhaling, or otherwise introducing into the human body a controlled substance.

Examples of drug paraphernalia are items primarily intended or designed for use in ingesting, inhaling, or otherwise introducing marijuana, cocaine, hashish, hashish oil, PCP, or amphetamines into the human body, such as metal, wooden, acrylic, glass, stone, plastic, or ceramic pipes with or without screens, permanent screens, hashish heads, or punctured metal bowls; water pipes, chamber pipes, carburetor pipes, electric pipes, ice pipes or chillers, and air-driven pipes; carburetion tubes and devices; smoking and carburetion masks; roach clips (i.e., objects used to hold burning material that is too small or short to be held in the hand); miniature spoons with level capacities of 1/10 cubic centimeter or less; chillums; bongs; wired cigarette papers; and cocaine freebase kits.

453.131 **Determination**

In determining whether an item constitutes drug paraphernalia, in addition to all other logically relevant factors, these factors may be considered:

- a. Oral or written instructions or other descriptive materials provided with the item that explain or depict its use.
- b. National and local advertising on its use.
- c. The manner in which the item is displayed for sale.

- d. Whether the owner, or anyone in control of the item, is a legitimate supplier of like or related items to the community, such as a licensed distributor or dealer of tobacco products.
- e. Direct or circumstantial evidence of the ratio of sales of the items to the total sales of the business enterprise.
- f. The existence and scope of legitimate uses of the item in the community.
- g. Expert testimony on its use.

453.132 **Exceptions**

The standards in [453.13](#) and [453.131](#) apply neither to any person authorized by local, state, or federal law to manufacture, possess, or distribute items described in [453.13](#) and [453.131](#); nor to any item that, in the normal lawful course of business, is sold through the mail and traditionally intended for use with tobacco products, including any pipe, paper, or accessory.

453.2 **Mailer Responsibility**

The mailer is fully responsible for the following:

- a. Ensuring compliance not only with Postal Service regulations, but also with all other federal laws and regulations, such as the Poison Prevention Packaging Act and the Consumer Product Safety Act, and with all local laws and regulations governing distribution of unsolicited samples.
- b. Being aware of other characteristics of an article or substance, such as its flammable, toxicity, or corrosive characteristics that may affect mailability.

453.3 **Mailability**

453.31 **Controlled Substances**

If the distribution of a controlled substance is unlawful under 21 U.S.C. 801–971 or any implementing regulation in 21 CFR Chapter II, then the mailing of the substance is also unlawful under 18 U.S.C. 1716.

Controlled substances and drugs that contain controlled substances are acceptable in the domestic mail only under the following conditions:

- a. For mailable controlled substances, generally both the mailer and addressee must meet either of the following conditions:
 - (1) Be registered with the Drug Enforcement Administration (DEA).
 - (2) Be exempted from DEA registration, such as military, civil defense, and law enforcement personnel, in performing official duties.
- b. For mail-back programs conducted in accordance with [453.7](#).
- c. For prescription medicines containing mailable narcotic drugs (controlled substances), when mailed by drug manufacturers or their registered agents, pharmacies, medical practitioners, or other authorized dispensers as permitted by 21 CFR 1307.11 or in compliance with any regulation of the Food and Drug Administration or other applicable law.

453.32 Drugs (Other Than Controlled Substances)

All prescription, nonprescription, and patent medicines and related items, including solicited and unsolicited samples of such items, that are not considered to be controlled substances under [453.11](#), are permitted to be mailed as follows:

- a. For prescription medicines containing a nonnarcotic drug(s), only a pharmacist or medical practitioner, etc., who dispenses the medicine may mail such substances to the patients under their care.
- b. For nonprescription medicines, the mailer must meet all applicable federal, state, or local laws that may apply (such as the Poison Prevention Packaging Act of 1970 in 15 U.S.C. 1471(2) and the Consumer Product Safety Commission requirements in 16 CFR 1700).

453.33 Poisonous Drugs and Medicines

Poisonous drugs and medicines may be sent only from the manufacturer or dealer to licensed physicians, surgeons, dentists, pharmacists, druggists, cosmetologists, barbers, and veterinarians (18 U.S.C. 1716). Some poisonous drugs are subject to the requirements for Division 6.1 materials in Chapter [3](#).

453.34 Small Amounts for Law Enforcement Purposes

Nothing in this section precludes the mailing of small amounts of unknown matter suspected of containing controlled substances to a federal, state, or local law enforcement agency for law enforcement purposes. Such mailings must comply with the applicable packaging requirements in [453.4](#).

453.35 Drug Paraphernalia

It is unlawful to use the mail to transport drug paraphernalia under the Controlled Substances Act. If use of the mail to transport an article is unlawful under the Controlled Substances Act, the article also is nonmailable (see [453.13](#)).

453.36 Return of Prescription Drugs

Mailers may use merchandise return service to return prescription drugs for purposes of drug recalls; voluntary manufacturer withdrawals; and dispensing errors such as incorrect drug, dosage, or strength, as permitted by 21 CFR 1307.11 or other applicable law. The mailpiece must be addressed to the manufacturer or its registered agent. Manufacturers or their registered agents must furnish mailing containers to their customers for the purpose of mailing back the identified drugs. Manufacturers or their registered agents must use merchandise return service (see DMM 505.3.0) with First-Class Mail or Priority Mail for these mailpieces. Manufacturers or their agents continue to be responsible for maintaining records in compliance with any regulation of the Drug Enforcement Administration and/or the Food and Drug Administration.

453.37 Hemp-based Products

For purposes of this section, “hemp” shall have the meaning provided under federal law, including Section 10113 of the Agricultural Improvement Act of 2018, Pub. L. 115-334 (7 U.S.C. § 1639o), or any successor provision.

Hemp and hemp-based products, including cannabidiol (CBD) with the tetrahydrocannabinol (THC) concentration of such hemp (or its derivatives) not exceeding a 0.3 percent limit are permitted to be mailed in domestic mail only when:

- a. The mailer complies with all applicable federal, state, and local laws, and plans approved by the USDA under 7 CFR Part 990 pertaining to hemp production, processing, distribution, and sales; and
- b. The mailer retains records establishing compliance with such laws and plans, including laboratory test results, licenses, or compliance reports, for no less than 3 years after the date of mailing.

Shipments of hemp and hemp-based products, including cannabidiol (CBD), are prohibited in international mail including items for delivery to overseas military and diplomatic Post Office addresses (APO, FPO, and DPO).

453.4 **Packaging and Marking**

Securely package all mailable drugs so that the contents cannot become damaged or dislodged during mailing. The following conditions apply:

- a. *Controlled substances.* The inner packaging of any mailpiece containing a mailable controlled substance must be marked and sealed in accordance with the applicable provisions and regulations of the Controlled Substances Act (see [453.11](#)). The inner packaging is also labeled to show the prescription number and the name and address of the pharmacy, practitioner, or other person dispensing the prescription and must be securely held within a plain outer wrapper or packaging. No markings of any kind that indicate the nature of the contents may appear on the outside of the mailpiece. The general packaging requirements in DMM 601.1-7 also apply.
- b. *Drugs and Medicines.* Drugs and Medicines. Except for promotional samples as described in [453.4c](#), each mailpiece containing a mailable drug or medicine (that does not contain a controlled substance) must be held in a plain outer wrapper or packaging.
- c. *Promotional Samples.* A promotional sample package containing a mailable over the counter, non-controlled, non-prescription drug or medicine may bear a brief description of the sample as well as the marking "Sample Enclosed" on the outside packaging of the mailpiece.

453.5 **Rulings**

Rulings must be based on the chemical composition of a product; the composition of commercial products is ever-changing-e.g., the packaging declares a "new and improved formula."

Requests for rulings must include the trade name of the product, as well as information regarding any known hazardous ingredients. A generic description of the item (e.g., "tranquilizers") is not sufficient. Requests for rulings are directed to the local postmaster (see [215.3](#)).

453.6 Nonmailable Matter Found in the Mails

Nonmailable controlled substances, drugs, and drug paraphernalia discovered in the mailstream must be immediately reported in accordance with POM 139.117.

453.7 Mail-back Programs

Effective October 9, 2014, the U.S. Department of Justice, Drug Enforcement Administration (DEA), published the *Federal Register* final rule titled “Disposal of Controlled Substances” (79 CFR 53519-53570), where it provided new regulations specific to the collection and disposal of controlled substances. This regulation authorized the use of DEA authorized mail-back collectors (mailers) or law enforcement entities to conduct mail-back programs. Though these programs authorize ultimate users who have lawfully obtained unused or unwanted pharmaceuticals to transfer controlled substance pharmaceuticals to authorized mail-back collectors for the purpose of disposal, USPS authorization to conduct mail-back programs is subject to the following conditions:

a. General

DEA registrants wishing to become controlled substances “mail-back collectors” must obtain authorization from the DEA prior to conducting a mail-back program, and must have the ability to destroy the returned substances onsite. DEA-registered mail-back collectors must also obtain an authorization from the USPS manager, Product Classification prior to the implementation of any mail-back program. Mail-back programs may only be authorized within the customs territory of the United States (the 50 States, the District of Columbia, and Puerto Rico).

b. Packaging

Authorized DEA registrants participating in a mail-back program must provide users with ready-made packaging. All packaging used in mail-back programs must:

- (1) Be nondescript and must not include any markings or other information that might indicate that the package contains controlled substances.
- (2) Be water- and spill-proof, tamper-evident, tear-resistant, and sealable.
- (3) Be preaddressed for delivery to the authorized mail-back collector’s registered address or the participating law enforcement’s physical address.
- (4) Have postage pre-paid using one of the following products:
 - (a) Priority Mail Return Service,
 - (b) First-Class Package Return Service, or
 - (c) Business Reply Mail parcels.
- (5) Be accompanied by instructions for the user that describes the process for mailing back the package, and other required information.

c. **Labels**

Prior to requesting authorization, applicants (mailers) must:

- (1) Implement a process for generating labels including unique Intelligent Mail package barcodes, prepared in accordance with DMM 708.5.1, Publication 199, and the *Parcel Labeling Guide*. Publication 199 and the *Parcel Labeling Guide* are available on PostalPro at <http://postalpro.usps.com/>.
- (2) Applicants must obtain written approval for their labels and barcode quality from the National Customer Support Center (NCSC) prior to submitting their request for authorization to conduct a mail-back program.

d. **Authorization**

Mailers wishing to conduct a mail-back program must submit a letter of request to the manager, Product Classification (see DMM 608.8.1 for address). Requests must include:

- (1) The registrant's name, address, and DEA certificate of registration;
- (2) The authorized mail-back collector's DEA-registered location;
- (3) An irrevocable \$50,000 surety bond or letter of credit as proof of sufficient financial responsibility to cover disposal costs if the vendor ceases doing business to cover destruction costs of residual mail-back envelopes that are in Postal Service possession. The surety bond or letter of credit must be issued in the name of the vendor seeking the authorization and must name the Postal Service as the beneficiary or obligee;
- (4) A letter of approval from the NCSC for each label type used to conduct their mail-back program; and
- (5) Sample mailpieces and labels intended for use with their mail-back program.

e. **Discontinuation**

In the event an authorized mail-back collector terminates, transfers, or discontinues business, that collector must provide the manager, Product Classification with the name, registered address, and registration number of the mail-back collector that will receive the remaining mail-back packages, in accordance with DEA regulations.

453.8 **Undeliverable Medicines**

The disposition of undeliverable mailpieces containing drugs and medicines is governed by POM 691.52

454 **Unsolicited Promotional Samples**454.1 **Definition**

The term "unsolicited promotional sample" refers to any article of merchandise that is sent through the mail free of charge and that is unrequested by the addressee. This definition includes items such as patent medicines, cosmetics, laundry products, and razors.

454.2 Mailability**454.21 General**

The fact that an item is unsolicited by the addressee generally does not affect its mailability unless the article is composed of hazardous materials or restricted matter. Hazardous materials are subject to the mailing conditions in Chapter 3 of this publication, as applicable. Unsolicited items that are not hazardous materials may be subject to additional packaging requirements based on the content.

454.22 Nonmailable Promotional Samples**454.221 Abortive and Contraceptive Devices or Materials**

Any article or instrument designed, adapted, or intended for producing abortion is nonmailable (18 U.S.C. 1461).

Unsolicited samples of an article or instrument designed, adapted, or intended for preventing conception is nonmailable, except when mailed to a manufacturer, dealer, licensed physician or surgeon, nurse, pharmacist/druggist, or a hospital or clinic (39 U.S.C. 3001 and 18 U.S.C. 1461).

454.222 Restricted or Improperly Prepared Items

Other types of unsolicited samples may be nonmailable for other reasons, including the following:

- a. The sample is an otherwise restricted item such as a toxic substance or poison subject to the hazardous materials requirements in Chapter 3.
- b. The sample is improperly prepared for mailing, such as an inadequately packaged razor blade or a household substance (39 U.S.C. 3001(f)), i.e., any matter unsolicited by the addressee, that contains a substance as defined by section 2 of the Poison Prevention Packaging Act of 1970 (15 U.S.C. 1471(2)), that does not comply with the child-resistant packaging established for that substance by the Consumer Product Safety Commission (16 CFR 1700).
- c. The sample is a pesticide (18 U.S.C. 1716), i.e., any matter that contains a pesticide as defined by section 2 of the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136(u)), that does not comply with child-resistant packaging standards established by the Environmental Protection Agency applicable to that particular matter (40 CFR 157) and meets the applicable standards in 10.0.
- d. A fragrance advertising sample (39 U.S.C. 3001(g)), i.e., any matter normally acceptable in the mail but containing a fragrance advertising sample, that does not comply with the requirements to be sealed, wrapped, treated, or otherwise prepared in a manner reasonably designed to prevent individuals from being unknowingly or involuntarily exposed to the sample. A sample meets this requirement if it uses paper stocks with a maximum porosity of 20 Sheffield units or 172 Gurley-Hill units treated exclusively with microencapsulated oils, and if the sample is produced so that it cannot be activated except by opening a glued flap or binder or by removing an overlying ply of paper.

- e. The sample is an odd-shaped item in a letter-size envelope that is prohibited under DMM 601.3.3.

454.3 **Certificate Compliance**

A mailer, who presents matter that is generally permitted in the mail, but for compliance with the specified packaging and preparation requirements, may submit an accompanying written statement certifying that the matter is packaged or prepared under the applicable federal laws and postal standards. The certifying statement may be made on the mailer's letterhead, on a postage statement, or as a notice on the exterior of each item presented for mailing.

454.4 **Customer Objection to Unsolicited Matter**

Customers who object to receiving unsolicited matter should be advised that the Postal Service must accept any lawfully mailable matter that is properly prepared for mailing and bears appropriate postage. These customers may be directed to contact the mailer or manufacturer to have their names removed from the mailing list. Customers also may be advised they may refuse any piece of mail, either at the time it is offered for delivery or after it is delivered (if unopened), as provided in DMM 508.1 and POM 611.

454.5 **Rulings**

Rulings sometimes can be provided based on the trade name of an item, but that is not always possible. A generic description, such as "razor blade," "cleaner," "aerosol product," or "drug," is insufficient for determining mailability. To request a ruling on the mailability of restricted matter, furnish the information in [215.3](#) to the local postmaster.

If the matter for which the ruling is being requested has the physical characteristics of a toxic substance, flammable liquid, compressed gas, or other hazardous material, a ruling should be requested under the conditions in [215.2](#).

455 **Building Construction Material**

455.1 **Definition**

The term "building construction material" refers to any material which is used for construction purposes. Naturally occurring substances, such as clay, rocks, sand, and wood, fit into this category and some of these substances could be man-made products using synthetics.

455.2 **Mailability**

Building construction material is not permitted in the mail if the acceptance and processing is likely to harm or injure USPS employees, mail, or equipment. Factors considered include, but are not limited to, whether the material may pose potential storage problems at the postal facilities that may process the material; whether the volume of material may impede the flow of mail in USPS transportation or mail distribution systems; whether the volume of material may lead to security problems; and whether processing the material may create safety hazards for USPS employees.

455.3 Rulings

Rulings must be based on the composition of the product. Requests for rulings must include the trade name of the product, as well as information regarding any known hazardous ingredients. A generic description of the item is not sufficient. Requests for rulings are directed to the local Postmaster (see [215.3](#)).

455.4 Nonmailable Matter Found in the Mails

Nonmailable building construction material discovered in the mailstream must be immediately reported in accordance with POM 139.117.

456 Lottery**456.1 Definition**

The term “lottery” is any scheme or promotion, whether lawful under the laws of any state, which, on paying a consideration, offers a prize dependent in whole or in part on lot or chance. Lottery matter refers to any check, draft, bill, money, postal note, or money order that is sent through the mail for the purchase of any ticket or part thereof; for the purchase of any share or chance in any such lottery, gift enterprise, or scheme; or for the payment of prepaid taxes or fees purportedly required to collect lottery winnings.

456.2 Mailability

Mailed lottery tickets and related matter are statutorily defined as nonmailable pursuant to 39 U.S.C. 3001, *Nonmailable matter*. Specifically, 39 U.S.C. 3001(a) states that matter deposited in the mail which is punishable under 18 U.S.C. 1302, *Mailing lottery tickets or related matter*, is nonmailable and subject to criminal penalties. The term “related matter” includes funds remitted through the mail as noted in section [456.1](#) and DMM 601.9.3.

456.3 Nonmailable Determination

Excluding fishing contests, the Indian Gaming Regulatory Act, and lotteries, as defined in DMM 601.9.3.3, the following, among other factors, may be considered when determining whether a mailing constitutes nonmailable lottery matter:

- a. Statements made by the sender or recipient that the mailing contains lottery-related material.
- b. The mailing matches a pre-established profile of lottery-related mailings based on the sender’s return address.
- c. Evidence that the recipient address is used to receive lottery-related mailings.

46 Animal-Fighting Ventures

461 Definitions

461.1 Animal

For the purposes of participating in an animal-fighting venture, the term “animal” refers to any live bird, dog, or other mammal (except human).

461.2 Animal-Fighting Venture

The term “animal-fighting venture” means any event, in or affecting interstate or foreign commerce, that involves a fight conducted or to be conducted between at least two animals for purposes of sport, wagering, or entertainment (excluding any activity whose primary purpose involves using one or more animals in hunting other animals).

461.3 Animal-Fighting Accessory

The term “animal-fighting accessory” refers to a knife, gaff, or other sharp instrument attached to or designated or intended to be attached to the leg of a bird in an animal-fighting venture.

461.4 Animal-Fighting Matter

Animal-fighting matter refers to written, printed, or graphic matter (e.g., advertisements or other commercial speech) promoting or furthering an animal-fighting venture.

462 Mailability

- a. The mailing of a live animal for the purpose of participating in an animal-fighting venture, as defined in [461.2](#), is prohibited regardless of whether such venture is permitted under a United States state, district, commonwealth, territory, or possession in which it is conducted. Violators can be subject to criminal penalties under 7 U.S.C. 2156 and 18 U.S.C. 49.
- b. The mailing of animal-fighting accessories as defined in [461.3](#) is prohibited. Violators can be subject to criminal penalties under 7 U.S.C. 2156.
- c. The mailing of animal-fighting matter promoting or furthering an animal-fighting venture conducted in any state, except for a venture involving live birds permitted under the laws of the state in which they are conducted, is nonmailable. See DMM 601.7.5.7.

47 Cigarettes, Smokeless Tobacco, and Electronic Nicotine Delivery Systems

471 Definitions

471.1 Cigarette

Any roll of tobacco wrapped in paper or in any substance not containing tobacco, and any roll of tobacco wrapped in any substance containing tobacco, which because of its appearance, the type of tobacco used in the filler, or its packaging and labeling, is likely to be offered to, or purchased by, consumers as a cigarette. The term cigarette includes roll-your-own tobacco and excludes cigars.

471.2 Smokeless Tobacco

Any finely cut, ground, powdered, or leaf tobacco that is intended to be placed in the oral or nasal cavity or otherwise consumed without being combusted.

471.3 Cigar

Any roll of tobacco wrapped in leaf tobacco or in any substance containing tobacco, unless, because of its appearance, the type of tobacco used in the filler, or its packaging and labeling, is likely to be offered to, or purchased by, consumers as a cigarette.

471.4 Roll-Your-Own Tobacco

Any tobacco, which because of its appearance, type, packaging, or labeling, is suitable for use and likely to be offered to, or purchased by, consumers as tobacco for making cigarettes or cigars, or for use as wrappers thereof.

471.5 Electronic Nicotine Delivery System (ENDS)

Any electronic device that, through an aerosolized solution, delivers nicotine, flavor, or any other substance to the user inhaling from the device. ENDS include but are not limited to the following:

- a. Electronic cigarettes (e-cigarettes).
- b. Electronic hookahs (e-hookahs).
- c. Electronic cigars (e-cigars).
- d. Vape pens.
- e. Advanced refillable personal vaporizers.
- f. Electronic pipes.

Any reference to ENDS includes any component, liquid, part, or accessory of an ENDS device, regardless of whether the component, liquid, part, or accessory is sold or provided separately from the device, or regardless of whether it contains or is used with nicotine.

471.6 Covered Product

For purposes of chapter [47](#), any cigarette, smokeless tobacco, or ENDS.

471.7 Consumer Testing

Testing limited to formal data collection and analysis for the specific purpose of evaluating the product for quality assurance and benchmarking purposes of cigarette brands or sub-brands among existing adult smokers.

471.8 State

Any of the 50 states of the United States, the District of Columbia, and any commonwealth, territory, or possession of the United States.

471.9 Minimum Age

The minimum age to send or receive covered products (see [471.6](#)) is 21 years old (the federally required minimum age for the sale or purchase of covered products), or such higher age that a state or municipality may impose for the legal sale or purchase of covered products at the place of acceptance or delivery, as appropriate.

472 Covered Products Generally Nonmailable**472.1 General**

The following are nonmailable:

- a. Any shipment of covered products described in [473.1](#).
- b. Shipments of covered products that are not described in [473.1](#) and do not qualify for an exception under [473.2](#) through [473.6](#).
- c. Shipments of covered products that are not described in [473.1](#) and would generally qualify for an exception under [473.2](#) through [473.6](#), but fail to meet one or more conditions for the applicable exception. For example, a recipient may fail to be verified as being of at least the required minimum age (see [473.35a](#), [473.45a](#), and [473.55a](#)), or a Return Receipt may be absent or lack the mailer's eligibility number (see [473.33b](#) and [473.53c](#)).

472.2 Treatment of Nonmailable Covered Products**472.21 Refusal of Acceptance and Transmission**

The Postal Service will not accept, forward, or deliver any package that it knows, or has reasonable cause to believe, contains nonmailable covered products. If the Postal Service reasonably suspects that a mailer is tendering nonmailable covered products, then the mailer bears the burden of proof in establishing eligibility to mail.

472.22 Seizure and Forfeiture

Nonmailable covered products deposited in the mail are subject to seizure and forfeiture. Any nonmailable covered products seized and forfeited will be destroyed or retained by the federal government for the detection or prosecution of crimes or related investigations, and then destroyed.

472.23 Disposition of Nonmailable Covered Products Not Seized and Forfeited

Any nonmailable covered products not seized and forfeited will be handled in accordance with [216](#) and [414](#).

472.24 Penalties

Persons involved in the shipment or attempted shipment of nonmailable covered products may be subject to seizure and forfeiture of assets, criminal fines, imprisonment, and civil penalties.

472.3 Reasonable Cause to Suspect Covered Products

Among any other potentially relevant circumstances, the Postal Service has reasonable cause to suspect the presence of covered products based on:

- a. A statement on a publicly available website, or an advertisement, by any person that the person will mail matter which is nonmailable under this section in return for payment;
- b. The fact that the mailer or other person on whose behalf a mailing is being made is on the U.S. Attorney General's List of Unregistered or Noncompliant Delivery Sellers; or
- c. Any other characteristics of a package or label, individually or in combination with other packages or labels, that reasonably indicate the likely presence of covered products.

472.4 Applicability of Other Laws and Regulations

Shipments permitted under [473](#) are subject to all other applicable federal, state, and local laws and regulations. For example, ENDS that consist of or contain one or more of the following may be subject to prohibitions, restrictions, or additional requirements stated elsewhere in this publication:

- a. Controlled substances (including cannabis and cannabis derivatives).
- b. Drug paraphernalia.
- c. Lithium batteries.
- d. Liquids.
- e. Any toxic or flammable substance (e.g., nicotine, diacetyl [butane-2,3-dione], propanol, and other components of ENDS liquids).

Mailers, recipients, and applicants are solely responsible for complying with all applicable Postal Service regulations and other federal, state, and local laws when mailing covered products.

472.5 Recordkeeping

Mailers, recipients, and applicants must maintain records to establish compliance with the requirements in [473](#) for a 6-year period and must make such records available to the Postal Service upon request.

473 Mailability Exceptions**473.1 Scope of Exceptions**

Covered products are mailable if one of the conditions in [473.2](#) through [473.6](#) is met. These exceptions do not apply to the following:

- a. Mail treated as domestic under DMM section 608.2.2.
- b. Mail sent to Air/Army Post Office (APO), Fleet Post Office (FPO), or Diplomatic Post Office (DPO) addresses.

- c. Mail presented at APO, FPO, or DPO installations and destined to addresses in the United States.
- d. International mail as defined in DMM section 608.2.3.
- e. Mail presented outside of a face-to-face transaction with a Postal Service employee at a Postal Service retail or business mail acceptance location. Examples of prohibited entry methods include, but are not limited to the following:
 - (1) Pickup on Demand.
 - (2) Package pickup.
 - (3) An Approved Shipper location or other third-party acceptance location.
 - (4) A Contract Postal Unit.
 - (5) A Village Post Office.
 - (6) Placement in a customer mailbox, collection box, or Postal Service lobby drop.

473.2 **Intra-Alaska and Intra-Hawaii Shipments**

Intra-Alaska and intra-Hawaii shipments of covered products are mailable, provided that such mailings:

- a. Are presented in a face-to-face transaction with a Postal Service employee within the state, and not through any entry method prohibited under [473.1e](#);
- b. Destinate in the same state of origin;
- c. Bear a valid complete return address that is within the state of origin; and
- d. Are marked with the following exterior marking on the address side of the mailpiece, with the relevant type of item selected: "INTRASTATE SHIPMENT OF [CIGARETTES/SMOKELESS TOBACCO/ENDS]."

473.3 **Exception for Business/Regulatory Purposes**

473.31 **General**

Eligibility to mail and to receive mail under the business/regulatory purposes exception is limited to federal and state government agencies and legally operating businesses that have all applicable state and federal government licenses or permits and are engaged in the manufacturing, distribution, wholesale, export, import, testing, investigation, or research of covered products.

Mailings under this exception are permitted only for business purposes between eligible businesses or for regulatory purposes between such businesses and eligible government agencies. Mailability is further restricted to mailings that comply with all conditions in [473.32](#) through [473.35](#).

473.32 **Application**

Each customer seeking to mail covered products under the business/regulatory purposes exception must submit a complete application (PS Form 4615 or 4615-E, as appropriate) and, for ENDS, complete

Worksheets 4615-EM and 4615-ER as appropriate, along with all supporting documentation requested on those forms and worksheets.

The following conditions apply:

- a. Along with any other information requested on PS Form 4615 or 4615-E and Worksheets 4615-EM and 4615-ER, the applicant must furnish the following information:
 - (1) The applicant's legal status, copies of any applicable licenses, and authority under which the applicant operates.
 - (2) The recipient's legal status, copies of any applicable licenses, and operational authority for all recipients to which the mailings under this exception will be addressed.
 - (3) All Post Office locations where mail containing covered products will be presented.
 - (4) For each business mailer and/or recipient, the nature of the relevant business activities (e.g., manufacturing, wholesale, distribution, testing, investigation, import, and export).
 - (5) The brand name and a description of each product intended to be mailed. For ENDS, descriptions must include the following information:
 - (a) The source of any CBD;
 - (b) The concentration of any THC; and
 - (c) Safety data sheets or technical specification documentation for any hazardous materials (e.g., lithium batteries, nicotine, diacetyl [butane-2,3-dione], or propanol).
- b. The applicant is responsible for establishing the eligibility of each sender and recipient, and for the accuracy, completeness, and currency of all information provided in the application. Applications must be submitted via email to MDA@usps.gov as follows:
 - (1) For cigarettes and smokeless tobacco: PS Form 4615.
 - (2) For ENDS: PS Form 4615-E and Worksheets 4615-EM and 4615-ER.
- c. The director of PCSC will determine eligibility to mail under the business/regulatory purposes exception. The following applies:
 - (1) The mailer bears the burden of establishing eligibility and must furnish any additional supporting documentation requested by the director of PCSC upon request as necessary.
 - (2) The director of PCSC may approve or deny an application in its entirety or only with respect to certain mailers and/or recipients.
 - (3) A number is assigned to each letter of eligibility.
- d. The applicant is responsible for amending the information in its application, including any updated documentation, in a timely manner, as necessary, at least 15 days before conducting any mailing to or from an entity to which the information pertains.

- e. Upon written request by a state or federal agency, the director of PCSC may, in his or her discretion, waive certain application requirements for mailings entered by the requesting state or federal agency for regulatory purposes. The director of PCSC may suspend, rescind, or modify any waiver at any time.
- f. Any determination of eligibility to mail under this exception will lapse if the authorized mailer does not tender any mail under this exception within any 3-year period. After that time, the affected mailer must apply for and receive new authorization for any mailings under this exception.
- g. Current lists of authorized mailers will be made available to retail and business mail acceptance personnel.

473.33 **Mailing**

All mailings tendered under the business/regulatory purposes exception must:

- a. Be mailed using one of the following combinations of services:
 - (1) Priority Mail Express with Adult Signature Required or Adult Signature Restricted Delivery service (see DMM section 503.8.0).
 - (2) Priority Mail with Adult Signature Required or Adult Signature Restricted Delivery service.
- b. Be accompanied by a Domestic Return Receipt (PS Form 3811). The sender's address block must bear the eligibility number issued by the PCSC and be made returnable to the following address as shown below:

PCSC, PACT MAILING OFFICE
USPS ELIGIBILITY NO. XX-00-0000
90 CHURCH ST., STE 3100
NEW YORK, NY 10007-2951
- c. Bear the following marking, with the relevant type of item and recipient selected: "[CIGARETTE, SMOKELESS TOBACCO, or ENDS]
MAILING—DELIVER ONLY TO EMPLOYEE OF ADDRESSEE
[BUSINESS or AGENCY] UPON AGE VERIFICATION" on the address side of the mailpiece.
- d. Bear the business or government agency name and full mailing address of both the sender and recipient. Each must match exactly those listed on the authorized mailer's application on file with the Postal Service.
- e. Be entered at a retail and/or business mail acceptance location specified in the application and authorized by the PCSC.

473.34 **Entry and Acceptance**

Mailings under the business/regulatory purposes exception must be entered under the following conditions:

- a. Covered products must be tendered via a face-to-face transaction with a Postal Service employee. Applicable mailings may not be tendered through any entry method prohibited under [473.1e](#).

- b. The mailer must present Postal Service acceptance personnel with the following:
 - (1) For shipments of cigarettes and/or smokeless tobacco: A letter from the PCSC showing that the PCSC has authorized the mailer, addressee, and acceptance location.
 - (2) For shipments of ENDS:
 - (a) A letter from the PCSC showing that the PCSC has authorized the mailer and has not withheld authorization as to the addressee;
 - (b) A PCSC-approved Worksheet 4615-ER showing that the PCSC has authorized the addressee; and
 - (c) If applicable, (information exceeds space on authorization letter) a PCSC-approved Worksheet 4615-EM showing that the PCSC has authorized the mailer and the acceptance location.
- c. The Postal Service employee must verify that the mailer, addressee, and acceptance location match those authorized by the PCSC, based on the mailer's documentation and the current list of authorized mailers available to the Postal Service employee.

473.35 **Delivery**

Mailings bearing the marking for business/regulatory purposes will only be delivered to a verified employee of the addressee business or government agency under the following conditions:

- a. The recipient must be an adult of at least the required minimum age (see [471.9](#)) at the place of delivery. A Postal Service employee must verify the recipient's age before releasing or delivering the item to the recipient. The recipient must furnish proof of age via a driver's license, passport, or other government-issued photo identification that lists age or date of birth.
- b. The recipient must demonstrate status as an employee of the business or government agency identified as the addressee on the mailing label. Proof of employment may take the form of one or more of the following:
 - (1) An employee identification badge or card issued by the employer and including the following:
 - (a) Employee's name.
 - (b) Employer's name.
 - (c) Employer's telephone number.
 - (2) A signed letter on company or agency letterhead from a supervisor or human relations office attesting to the recipient's current employment.
 - (3) Where delivery is made to a business address, employment status may be inferred from the carrier's observation of such factors as the recipient's uniform and presence at a reception desk or retail counter.

- (4) Any other form of identification that the postmaster deems to be of comparable reliability.
- c. Once the recipient's age and identity as an employee of the addressee are verified, the recipient must sign for receipt of delivery and in the appropriate signature block of PS Form 3811.

473.4 **Exception for Certain Individuals**

473.41 **General**

The exception for certain individuals permits the mailing of small quantities of covered products by individual adults for noncommercial purposes. Mailability is further restricted to mailings that comply with all conditions in [473.42](#) through [473.45](#). Eligible shipments may be made to any type of recipient (individual, business, government, or other organization).

473.42 **Noncommercial Purposes**

Noncommercial purposes may include, but are not limited to, the following:

- a. Covered products exchanged as gifts between individual adults. For purposes of this rule, "gifts" do not include covered products that one individual purchased for another from a third-party vendor through a mail-order transaction, or covered products included at no additional charge with other matter in accordance with a commercial transaction.
- b. Damaged or unacceptable covered products that a consumer returned to the manufacturer or other business. The manufacturer or other business may provide the consumer with a refund, credit, replacement product, or other form of value in exchange for the damaged or unacceptable covered product, as long as it does not exceed the amount that the consumer paid for the damaged or unacceptable product plus the cost of return shipping for the damaged or unacceptable product.
- c. Used covered products sent by a consumer to a manufacturer or other business for recycling. For purposes of this rule, the consumer must not receive anything of value (e.g., a discount, credit, or rebate) in exchange for a returned item.

473.43 **Mailing**

No customer may send or cause to be sent more than 10 mailings under this exception in any 30-day period. Each mailing under the certain-individuals exception must:

- a. Weigh no more than 10 ounces.
- b. Be mailed using one of the following combinations of services:
 - (1) Priority Mail Express with Adult Signature Required or Adult Signature Restricted Delivery service (see DMM section 503.8.0).
 - (2) Priority Mail with Adult Signature Required or Adult Signature Restricted Delivery service.
- c. The Priority Mail Express or Priority Mail label must bear the full name and mailing address of the sender and recipient.

- d. Bear the following exterior marking on the address side of the mailpiece, with the relevant type of item selected: “PERMITTED [CIGARETTE/ SMOKELESS TOBACCO/ ENDS] MAILING—DELIVER ONLY UPON AGE VERIFICATION.”

473.44 **Entry and Acceptance**

Mailings under the certain-individuals exception must be entered under the following conditions:

- a. Covered products must be tendered via a face-to-face transaction with a Postal Service employee. Applicable mailings may not be tendered through any entry method prohibited under [473.1e](#).
- b. The individual presenting the mailing must furnish a driver’s license, passport, or other government-issued photo identification that lists age or date of birth. The following also applies:
 - (1) The name on the identification must match the name of the sender appearing in the return address block of the mailpiece.
 - (2) The customer must be an adult of at least the required minimum age at the place of acceptance (see [471.9](#)).
- c. For mailings addressed to an individual, at the time the mailing is presented the customer must orally confirm that the addressee is an adult of at least the required minimum age at the place of delivery (see [471.9](#)).

473.45 **Delivery**

Delivery under the certain-individuals exception is made under the following conditions:

- a. The recipient receiving or signing for the article must be an adult of at least the required minimum age at the place of delivery (see [471.9](#)). Postal Service employees must confirm this before releasing or delivering the item to the recipient. The recipient must furnish proof of age via a driver’s license, passport, or other government-issued photo identification that lists age or date of birth.
- b. Once the recipient’s age is verified, the recipient must sign for receipt of delivery.

473.5 **Consumer-Testing Exception**

473.51 **General**

The consumer-testing exception permits a legally operating cigarette manufacturer or a legally authorized agent of a legally operating cigarette manufacturer to mail cigarettes to verified adult smokers solely for consumer testing purposes. The manufacturer for which mailings are entered under this exception must have a permit, in good standing, issued under 26 U.S.C. § 5713. The consumer-testing exception applies only to cigarettes and not to smokeless tobacco or ENDS. Mailability is further restricted to mailings that comply with all conditions in [473.52](#) through [473.55](#).

473.52 Application

Each person seeking to mail cigarettes under the consumer-testing exception must email a complete application (PS Form 4616), along with all supporting documentation requested on that form, to MDA@usps.gov. For each application, the following conditions must be met:

- a. The applicant must furnish the following information:
 - (1) A copy of the relevant manufacturer's permit issued under 26 U.S.C. § 5713.
 - (2) If the applicant is an agent of a manufacturer, complete details about the agency relationship with the manufacturer.
 - (3) All locations where mail containing cigarettes for consumer testing will be presented.
- b. As part of the application, the applicant must certify in writing that it will comply with the following requirements:
 - (1) Any recipient of consumer-testing samples of cigarettes is an adult established smoker.
 - (2) No recipient has made any payment for the cigarettes.
 - (3) Every recipient will sign a statement indicating that the recipient wishes to receive the mailings.
 - (4) The manufacturer or the legally authorized agent of the manufacturer will offer the opportunity for any recipient to withdraw the recipient's written statement at least once in every 3-month period.
 - (5) Any package mailed under this exception will contain no more than 12 packs of cigarettes (maximum of 240 cigarettes) on which all taxes levied on the cigarettes by the state and locality of delivery have been paid, and all related state tax stamps or other tax-payment indicia have been applied.
- c. The application must be emailed to the director, PCSC, at MDA@usps.gov. The applicant bears the burden of establishing eligibility.
- d. The applicant must provide any requested copies of records establishing compliance to the director, PCSC, and/or the director, Product Classification (see [214](#) for address), no later than 10 business days after the date of the request.
- e. The director, PCSC, will determine eligibility to mail under the consumer-testing exception. The following applies:
 - (1) The director, PCSC, may approve or deny an application in its entirety or only with respect to certain mailers and/or recipients.
 - (2) A number is assigned to each letter of eligibility.
- f. For as long as the applicant or authorized mailer continues to mail under the consumer-testing exception, the applicant or authorized mailer must update the information in the application with the director, PCSC, as necessary, in a timely manner upon becoming aware of a change in application information. The information must be updated no later than 15 days before conducting any mailing.

- g. Any determination of eligibility to mail under this exception will lapse if the authorized mailer does not tender any mail under this exception within any 3-year period. After that time, the mailer must apply for and receive new authorization for any further mailings under this exception.
- h. Current lists of authorized mailers will be made available to retail and business mail acceptance personnel.

473.53 **Mailing**

All mailings under the consumer-testing exception must meet the following provisions or conditions:

- a. Be limited in tobacco content to no more than 12 packs of cigarettes (maximum 240 cigarettes) on which all taxes levied on the cigarettes by the destination state and locality have been paid, and all related state tax stamps or other tax-payment indicia have been applied.
- b. Be mailed using one of the following combinations of services:
 - (1) Priority Mail Express with Adult Signature Restricted Delivery service (see DMM section 503.8.0).
 - (2) Priority Mail with Adult Signature Restricted Delivery service.
- c. Be accompanied by a Domestic Return Receipt (PS Form 3811). The sender's address block must bear the eligibility number issued by the PCSC and be made returnable to the following address as shown below:

PCSC, PACT MAILING OFFICE
USPS ELIGIBILITY NO. XX-00-0000
90 CHURCH ST., STE 3100
NEW YORK, NY 10007-2951
- d. Bear the following marking: "PERMITTED CIGARETTE MAILING—DELIVER ONLY TO ADDRESSEE UPON AGE VERIFICATION" on the address side of the mailpiece.
- e. Bear the name and full mailing address of both the mailer and recipient. Each must match exactly those listed on the authorized mailer's application on file with the Postal Service.
- f. Not be addressed to an addressee located in a state that prohibits delivery or shipment of cigarettes to individuals in the destination state.
- g. Be sent only to an addressee who meets the following requirements:
 - (1) Has not made any payment for the cigarettes.
 - (2) Is being paid a fee for participation in consumer tests.
 - (3) Has agreed to evaluate the cigarettes and furnish feedback to the manufacturer in connection with the consumer test.
- h. Not exceed more than one package from any one manufacturer to an adult smoker during any 30-day period.
- i. Be entered at a retail and/or business mail acceptance location specified in the application and authorized by the PCSC.

473.54 Entry and Acceptance

Mailings under the consumer-testing exception must be entered under the following conditions:

- a. Covered products must be tendered via a face-to-face transaction with a Postal Service employee. Applicable mailings may not be tendered through any entry method prohibited under [473.1e](#).
- b. The mailer must present Postal Service acceptance personnel with a letter from the PCSC showing that the PCSC has authorized the mailer, addressee, and acceptance location.
- c. The Postal Service employee must verify that the mailer, addressee, and acceptance location match those authorized by the PCSC, based on the mailer's documentation and the current list of authorized mailers available to the employee.

473.55 Delivery

Mailings bearing the marking for consumer testing will only be delivered to the named addressee under the following conditions:

- a. The recipient signing for the article must be an adult at least 21 years old. The following requirements also must be met:
 - (1) A Postal Service employee must verify the recipient's age before releasing or delivering the item to the recipient.
 - (2) The recipient must furnish proof of age via a driver's license, passport, or other government-issued photo identification that lists age or date of birth.
 - (3) The name on the identification must match the name of the addressee on the Priority Mail Express or Priority Mail label.
- b. Once the recipient's age and identity are verified, the recipient must sign for receipt of delivery and in the appropriate signature block of PS Form 3811.

473.6 Public Health Exception

Federal government agencies involved in the consumer testing of tobacco products solely for public health purposes may mail cigarettes (this does not apply to smokeless tobacco or ENDS) under the mailing standards of [473.5](#), except as follows:

- a. The federal agency is not required to have a manufacturer's permit issued under 26 U.S.C. § 5713.
- b. The recipient is not required to be paid a fee for participation in consumer tests.

Upon written request, the director, PCSC, may waive certain application requirements for mailings entered by the requesting federal agency. The director, PCSC, may suspend, rescind, or modify any waiver at any time.

473.7 Suspension or Revocation of Eligibility

Eligibility to mail under one of the exceptions in [473.2](#) through [473.6](#) may be suspended or revoked by the director, PCSC, in the event of failure to comply with any applicable law or regulation. The following applies to suspensions or revocations:

- a. A customer may appeal an adverse initial decision to the director, Product Classification (see [214](#) for address).
- b. The mailer bears the burden of proof in establishing eligibility in any appeal of a suspension or revocation decision and of furnishing all supporting documentation when requested.
- c. Decisions by the director, Product Classification, to revoke a customer's eligibility under any exception may be appealed to the Judicial Officer under 39 CFR Part 953.

474 Additional Guidance**474.1 Interpretative Guidance**

The definitions in [471.1](#) through [471.5](#) and the exclusion in [474.2](#) are in accordance with section 1 of the Jenkins Act (15 U.S.C. § 375), which is administered by the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF). Interpretative guidance regarding these provisions may be requested by contacting ATF at the following address, with a copy to the PCSC (see [213](#) for address):

BUREAU OF ALCOHOL, TOBACCO, FIREARMS AND EXPLOSIVES
99 NEW YORK AVENUE NE
c/o 90 K ST. NE, STE. 250
WASHINGTON, DC 20226

474.2 Exclusion of Products Approved for Tobacco Cessation or Therapeutic Purposes

A product is excluded from the definition of ENDS in [471.5](#) (15 U.S.C. § 375(7)(C)) if:

- a. It is approved by the Food and Drug Administration for sale as a tobacco-cessation product or any other therapeutic purpose; and
- b. Is marketed and sold solely for such purposes.

Any party who believes that a product to be sent through the mail qualifies for this exclusion should provide appropriate documentation to ATF at the address in [474.1](#), with a copy to the PCSC.

5 Perishable Matter

51 Definition

511 General Definitions

Perishable matter is anything that can deteriorate in the mail and thereby lose value, create a health hazard, or cause an obnoxious odor, nuisance, or disturbance, under ordinary mailing conditions. Mailable perishable matter may be sent at the mailer's own risk when it is packaged as required and when it can be delivered within appropriate and reasonable time limits to prevent deterioration.

Examples of perishable matter include mailable types of live animals, food items, and plants.

512 Federal Statutes

Federal statutes impose restrictions and prohibitions on the mailing of fish, wildlife, plants, and products made from these, as well as plant pests, injurious animals, and taken fish, wildlife, and plants. The purpose of these restrictions and prohibitions is to protect agriculture, ecosystems, and natural resources in the United States. Additional information on these restrictions and prohibitions can be found in the Lacey Act and in the Endangered Species Act, U.S. Fish & Wildlife Service, the Animal Welfare Act, and the Plant Protection Act under the U.S. Department of Agriculture.

52 Animals

521 General Requirements

The full cooperation of the mailer is essential in order to safely and effectively transport animals through the mail. The following factors are applied to all shipments of mailable live or dead animals:

- a. Protection of Postal Service employees and the public against harm from dangerous or diseased animals.
- b. Protection of the mail and the environment against the following:
 - (1) Damage to the shipping container or other mailpieces from either the animal or the refrigerant used (e.g., moisture or condensation from melting ice, or pressure build-up from dry ice).
 - (2) Obnoxious odors and noise.

- c. Protection of animals against death, or protection of animal specimens against spoilage, taking into account the following:
 - (1) Expected time in transit.
 - (2) Expected temperature in transit (weather conditions).
 - (3) Packaging, including insulation against impact, heat, cold, and preventing suffocation.
- d. Ability of an animal to survive without food or water during transport. Live animals must be transported without food or water, because liquids, moisture, and loose foodstuffs can cause damage to the shipping container, other mail, and Postal Service equipment during transport.
- e. The ability of the Postal Service to provide transportation and delivery service. Mailers are urged to work with postmasters in providing advance notification of shipments of live animals. The Postal Service advises destination and transfer offices when any significant quantities of animals are moving in the mail. Postal Service field personnel should consider a 4-hour time limit on the period during which animals (especially bees, day-old poultry, and adult birds) may move in a regular, closed Postal Service vehicle.

522 **Packaging and Markings**

522.1 **Container Construction**

Any container used to mail perishable matter must be constructed to protect and securely contain the contents.

Shipping containers for mailable live animals must, at a minimum, be made of 275-pound test, double-wall, corrugated, weather-resistant fiberboard (W5c) or equivalent. USPS-produced packaging, including Flat Rate containers, are not eligible to be used. Additional container requirements apply to mailable adult birds.

522.2 **Security and Ventilation**

Containers must be constructed to prevent escape of animals, prevent the crushing of the container and contents during normal handling, and provide adequate ventilation for the animals at all times.

522.3 **Marking**

Each mailpiece must bear a complete return address and be marked on the address side with a description of the contents (e.g., “Live Animals,” “Live Honey Bees,” etc.). A mailpiece marked “If Undeliverable, Abandon” may not be accepted for mailing.

523 **Acceptance for Mailing**

A mailpiece containing live animals that cannot reach its destination in a viable condition should not be accepted. Factors that can be taken into consideration in assessing the viability of a mailpiece containing live animals include: use of proper packaging methods that protect against suffocation and crushing during transport; expected time in transit; and extreme weather conditions that exceed the normal weather pattern along the transportation route.

This provision does not give Postal Service personnel the authority to refuse mailable animals that are properly packaged or to impose local black-out periods based on temperature conditions, heavy mail volumes, etc.

Acceptance personnel must have reasonable justification to refuse a mailpiece. Before refusing any mailpiece that contains a mailable type of animal, acceptance personnel are to confer with the manager, business mail entry, at their district office or with the PCSC, as appropriate.

Animals mailed to the Republic of Palau, the Republic of the Marshall Islands, and the Federated States of Micronesia require a permit issued by the government of the destination country. See [642](#).

524 **Disposal**

Any mailpiece containing live animals that cannot be delivered to the addressee or returned to the sender within 72 hours (for live, day-old poultry) or within the delivery period marked on the parcel (for other mailable animals) must be disposed of immediately. For safety reasons, dispose of mailpieces not marked with a delivery period when it reasonably appears the articles cannot be delivered or returned in a viable condition. See POM 691.52 for disposal information. Also see [742.3](#) for the disposition of mailpieces that are refused by air carriers.

525 **Nonmailable Live Animals**

Nonmailable types of animals discovered in the mailstream must be reported to the PCSC in accordance with the instructions in POM 139.118.

Additionally, the mailer and the Post Office of mailing must be notified to prevent future shipments from being incorrectly accepted for mailing.

525.1 **Live Birds**

Day-old poultry vaccinated with Newcastle disease (live virus) is nonmailable. Day-old birds, except those specifically permitted under [526.3](#) are nonmailable.

525.2 **Live, Warm-Blooded Animals**

Warm-blooded animals, except for adult birds and specified day-old birds under the specific conditions in this section, are not mailable.

- a. Cats or kittens.
- b. Dogs or puppies.
- c. Guinea pigs.
- d. Hamsters.
- e. Mice.
- f. Rabbits.
- g. Rats.
- h. Squirrels and flying squirrels.

525.3 **Reptiles**

All snakes, turtles, and poisonous reptiles are nonmailable.

525.4 **Poisonous Insects and Spiders**

All poisonous insects and all spiders, except scorpions under limited circumstances (see [526.5](#)), are nonmailable. Other nonpoisonous and non-disease-conveying insects are permitted as stated in [Exhibit 526.6](#).

526 **Mailable Live Animals**

526.1 **General**

Some animals are mailable under proper conditions. See the specific instructions as noted for the following kinds of animals:

- a. Live bees, [526.2](#) and [Exhibit 526.21](#).
- b. Live, day-old poultry, [526.3](#) and [Exhibit 526.33](#).
- c. Live adult birds, [526.4](#).
- d. Live scorpions (only under limited circumstances), [526.5](#) and [Exhibit 526.5](#).
- e. Other small, harmless, cold-blooded animals, [526.6](#) and [Exhibit 526.6](#).

Note: Regarding dead animals or parts of animals, see [526.7](#) and [Exhibit 526.7](#).

526.2 **Live Bees**

526.21 **Mailability Requirements**

Honeybees and queen honeybees must be free of disease, as required under federal and state regulations. The following additional conditions apply:

- a. *Honeybees.* Honeybees are acceptable only via surface transportation, and must bear special handling fees, in addition to regular postage. Mailpieces must be plainly marked on the address side with “Live Bees” and “Surface Only” or “Surface Mail Only.”
- b. *Queen Honeybees.*
Via air transportation. Only queen honey bees may be shipped via air transportation. Each queen honeybee shipped via air transportation may be accompanied by up to eight attendant honeybees.
Via surface transportation. Queen honeybees shipped via surface transportation must bear special handling fees, in addition to regular postage.

All mailpieces containing queen honeybees must be plainly marked on the address side with “Live Queen Bees.” Refer to [Exhibit 526.21](#) for a general summary of the requirements for mailing live bees.

Exhibit 526.21

Requirements for Mailing Live Bees**Live Bees**

Contents must be either queen honeybees or honeybees. Bees must be securely packaged (see [522](#)) to provide adequate air and they must be kept within a tolerable temperature range at 40° to 100° F.

The use of insecticides must be eliminated in Postal Service areas that will be occupied by bee shipments.

Air Transportation

- Only queen honeybees may be shipped by air transportation.
- Each queen honeybee may be accompanied by up to eight attendant honeybees.
- Alert personnel to ensure the queen honeybees' timely and safe dispatch to, and arrival at, the destination.
- Equipment must be available for transportation up to the 4th zone. Advance arrangements must be made for shipment to addresses beyond the 4th zone.

Surface Transportation

- Any type of live honeybees may be shipped in the continental United States by surface transportation.
- Packages of honeybees must include special handling service fees, in addition to regular postage.
- Alert personnel to ensure the honeybees' timely and safe dispatch to, and arrival at, the destination.
- Equipment must be available for transportation up to the 4th zone. Advance arrangement must be made for shipment beyond the 4th zone.

526.22 Claims for Bee Shipments

Indemnity claims (see DMM 609) for damage, partial loss, and loss of insured shipments of mailable bees are accepted only in the following situations:

- a. Death of the bees resulted from Postal Service handling after conditions for mailability were met and when there was strong likelihood that the shipment could have been safely transported.
- b. Contents were lost because of damage to the container while in Postal Service custody.
- c. The complete package was lost in the mail.
- d. Special handling was purchased as required under [526.21](#).

526.3 Live, Day-Old Poultry**526.31 General**

The following live, day-old animals are acceptable for mailing when properly packaged: chickens, ducks, emus, geese, guinea birds, partridges, pheasants (only during April through August), quail, and turkeys. All other types of live, day-old poultry are nonmailable. Day-old poultry vaccinated with Newcastle disease (live virus) also is nonmailable.

526.32 Mailability Requirements

The specific types of day-old poultry named in [526.31](#) are mailable subject to the following requirements:

- a. Poultry that is not more than 24 hours old and is presented for mailing in the original, unopened hatchery box from the hatchery of origin.

- b. The date and hour of hatching is noted on the box by a representative of the hatchery who has personal knowledge thereof. (For Collect on Delivery (COD) shipments made by a hatchery for the account of others, the name or initials and address of the hatchery or the Post Office box number and address of the hatchery must be prominently shown for this standard.)
- c. Box is properly ventilated, of proper construction and strength to bear safe transport in the mail, and is not stacked more than 10 units high.
- d. Day-old poultry is mailed early enough in the week to avoid receipt at the office of address (in case of missed connections) on a Sunday, a national holiday, or the afternoon before a Sunday or national holiday.
- e. Day-old poultry can be delivered to the addressee within 72 hours of the time of hatching.
- f. Day-old poultry sent via surface transportation, must include special handling service fees, in addition to regular postage.
- g. Day-old poultry sent via air transportation must meet all provisions of the airlines. Delivery of the mailpiece is dependent on the availability of air carriers having available equipment to safely deliver the day-old poultry within the specified time limit.
- h. Day-old poultry that is first shipped via a commercial air express or air cargo service and then presented for mailing to a final destination must be in good condition and properly packaged as specified in [526.32a-e](#).
- i. Boxes of day-old poultry of about identical size, securely fastened together to prevent separation in transit, may be accepted for mailing as a single parcel, provided the total length and girth combined does not exceed Postal Service limits.

See [Exhibit 526.33](#), Requirements for Mailing Live, Day-Old Poultry. See Chapter [7](#) regarding domestic mail shipments sent via air transportation.

526.33 **Claims for Live, Day-Old Poultry**

Indemnity claims (see DMM 609) for damage, partial loss, and loss of insured shipments of mailable, live, day-old poultry are accepted only in the following situations:

- a. Death of the live, day-old poultry resulted from Postal Service handling after conditions for mailability were met and when there was strong likelihood that the shipment could have been safely transported.
- b. Contents were lost because of damage to the container while in Postal Service custody.
- c. The complete package was lost in the mail.
- d. Special handling was purchased as required under [526.32f](#).

Exhibit 526.33

Requirements for Mailing Live, Day-Old Poultry

| Answer each question and follow the instruction as indicated. | | YES | NO |
|--|--|---|---|
| 1. | Is poultry live, day-old poultry as listed in 526.31 ? | If pheasants, they are mailable only during April through August. Go to No. 2. | If not day-old poultry, item is NONMAILABLE. If not poultry or not day-old, check other mailable animal types in Section 52 to determine mailability. |
| 2. | Was hatching time 24 hours ago or less? | Go to No. 3. | NONMAILABLE. |
| 3. | Was poultry presented for mailing in original, unopened hatchery box from hatchery of origin? | Go to No. 4. | Do not accept. |
| 4. | Are boxes properly ventilated and of proper construction and strength to bear safe transport in mail? Note: Boxes of approximately identical size, securely fastened to prevent separation in transit, may be accepted for mailing as a single parcel if the mailpiece does not exceed DMM limits for combined length and girth or exceed 70 pounds in weight. | Boxes are not to be stacked more than 10 units high. Go to No. 5. | Do not accept. |
| 5. | Are the date and hour of hatching noted on box by representative of hatchery who has personal knowledge of facts? | Go to No. 6. | Do not accept. |
| 6. | Did shipment originate at another office, or was it sent by air express or air cargo and then presented for mailing? | Before accepting, take special precautions to ensure that shipment is in excellent condition. Go to No. 7. | Go to No. 7. |
| 7. | Is the shipment being mailed with a special handling service charge, in addition to regular postage? Exception: shipment is being mailed via air transportation. | Go to No. 8. | Shipment must include special handling service to be mailable. |
| 8. | If shipment is COD, have all conditions for using COD service (as required in DMM 503.11) been met? If not COD, go to No. 9. | Go to No. 9. | If COD, do not accept unless all applicable requirements in DMM 503.11 are met. |
| 9. | Is poultry being mailed sufficiently early in week to avoid arrival at the delivery post office on Sunday or holiday, or on afternoon preceding Sunday or holiday? | Go to No. 10. | Do not accept. |
| 10. | Can poultry be delivered to addressee within 72 hours of time of hatching, regardless of whether addressee resides in town or on rural or highway contract route? | Accept for mailing. | Do not accept. |

526.4 Adult Birds**526.41 General**

Mailers must be in compliance and may ship disease-free adult birds domestically under all applicable governmental laws and regulations, including the Lacey Act, the Endangered Species Act (ESA), the Animal Welfare Act, regulations of the U.S. Department of Agriculture, U.S. Fish and Wildlife Service, and any state, municipal, or local ordinances. Mailings must also be compliant with the requirements provided in USPS Publication 14, *Prohibitions and Restrictions on Mailing Animals, Plants, and Related Matter*, Chapter 5. In addition, each container or package must be marked as required by U.S. Fish and Wildlife Service under 50 CFR 14. Adult birds must be properly packaged and able to sustain shipment without food or water because liquids, moisture, and loose foodstuffs can cause damage to the shipping container, other mail, and Postal Service equipment during transport.

526.42 Mailability Requirements

Adult birds are mailable only when sent under the following conditions:

- a. The shipment is mailed using Priority Mail Express service.
- b. Each bird must weigh more than 6 ounces and no more than 25 pounds.
- c. The number of birds per parcel must follow the container manufacturer limits.
- d. The mailer must secure containers approved by the manager, Product Classification.
- e. The mailer must obtain authorization from the Manager of Product Classification (see [214](#) for address) and meet the requirements in Packaging Instruction 10D in Appendix C.
- f. The mailer must provide evidence of a test conducted by competent authorities using a full container of live birds throughout a 3-day period of challenge. The test must satisfy the following:
 - (1) Confinement of live birds in the container must neither endanger the health of the birds nor subject them to inhumane treatment.
 - (2) Environmental temperatures as high as 99 degrees Fahrenheit must pose no greater physiological stress on birds confined in the container than on birds in containers with conventional ventilation.
 - (3) Environmental temperatures of 0 degrees Fahrenheit and lower for extended periods must pose no greater physiological stress on birds confined in the container than on birds in containers with conventional ventilation.
 - (4) A reduced level of light and absence of visual stimuli should be evident in the container design in order to reduce the birds' awareness of being moved or sense of alarm due to the presence of humans or other animals nearby, and reduce their psychological stress.

526.43 Claims for Adult Birds

Indemnity may be paid only for articles that are lost, damaged, or for missing contents, and not for death of the birds in transit if there is no visible damage to the mailing container.

Postage refunds may not be available if the Priority Mail Express shipment was delivered or delivery was attempted within three days of the date of mailing as shown in the “Date In” box on Label 11. See DMM 609.

526.5 Live Scorpions

The mailing of scorpions is limited by the restrictions in 18 U.S.C. 1716. Under this limitation, scorpions are mailable only when sent for the purposes of medical research use or the manufacture of antivenin. Scorpions are nonmailable under any other circumstances. See [Exhibit 526.5](#) for mailing conditions that apply to permissible shipments.

Exhibit 526.5

Restrictions on Mailing Live Scorpions

Live scorpions are mailable only if EACH of the following conditions is met:

1. Must be for delivery only within the continental United States.
 2. May be sent only by surface transportation.
 3. Must be sent only for special purposes of either:
 - Medical research use.
 - Manufacture of antivenin.
 4. Must be properly packaged prior to mailing, as follows:
 - Live scorpions is packed in a double container system, with each receptacle closed or fastened in such a way as to prevent escape.
 - Inner receptacle is made of material that cannot be punctured by a scorpion.
 - Inner receptacle is marked “Live Scorpions.”
 - Cushioning material is used to prevent shifting of the inner receptacle.
 - Design of packaging is of sufficient strength, as required in [522](#), to prevent crushing of the mailpiece or escape of the contents during normal Postal Service handling and transport.
 - Address side of mailpiece is clearly marked “Live Scorpions.”
-

526.6 Small, Harmless, Cold-Blooded Animals

Small, harmless, cold-blooded animals, except for snakes, turtles, and turtle eggs, are mailable only when they meet certain requirements. For some examples, see [Exhibit 526.6](#).

Exhibit 526.6

**Requirements for Mailing Small, Harmless, Cold-Blooded Animals
(Except Snakes, Turtles, and Turtle Eggs)****General Requirements:**

All animals in this group:

- Must be able to reach their destination in good condition in the normal transit time between the mailing and address points.
- Must not require any food, water, or attention during transport.
- Must not create sanitary problems.
- Must not create obnoxious odors.

Specific Requirements by Animal:

| | |
|-------------------------|---|
| Baby Alligators | <ul style="list-style-type: none"> ■ Animals must not exceed 20 inches in length. ■ No additional requirements, except the applicable standards in section 52. ■ Packaging must comply with 522. |
| Baby Caimans | |
| Chameleons | |
| Frogs | |
| Lizards | |
| Newts | |
| Reptiles and Amphibians | |
| Salamanders | |
| Tadpoles and Toads | |

Specific Requirements by Animal:

| | |
|----------------------|--|
| Goldfish | <ul style="list-style-type: none"> ■ Fish must be held in a securely sealed primary receptacle. ■ Primary receptacle must be cushioned with sufficient absorbent material to take up all liquid in case of leakage. ■ Primary receptacle and absorbent cushioning material must be sealed within waterproof outer (shipping) packaging. |
| Tropical Fish | |
| Worms | <ul style="list-style-type: none"> ■ No additional requirements, except the applicable standards in section 52. ■ Packaging must comply with 522. |
| Bloodworms | |
| Hellgrammites | |
| Leeches | |
| Mealworms | |
| Snails | |
| Nonpoisonous Insects | <ul style="list-style-type: none"> ■ No additional requirements, except the applicable standards in section 52. ■ Packaging must comply with 522. |

526.7 **Dead Animals or Parts of Animals**

The dead bodies, or parts thereof, of any wild animals, wild birds, or eggs are acceptable for mailing only when they are lawfully killed or taken, and their shipment is not prohibited by law of the United States or of the state, territory, district, or foreign country or subdivision thereof in which killed or taken or offered for shipment. Mailing of fresh game is also subject to these standards. Dead animals or parts of animals include two groups of items:

- a. Group A: Items that need to be refrigerated.
- b. Group B: Items that must be dried.

See [Exhibit 526.7](#) for additional information on the conditions for mailing.

Exhibit 526.7

Requirements for Mailing Dead Animals or Parts of Animals

| GROUP A: Items that need to be refrigerated | |
|---|--|
| <p>Game birds, fish, or other animals to be used for food.</p> <p>Animals or animal parts to be used in conservation studies or to be preserved by taxidermy.</p> | <p>Mailable only when:</p> <ul style="list-style-type: none"> ■ Overall requirements for animals (see 521) are met. ■ A proper refrigerant is used as follows: <ul style="list-style-type: none"> – Water ice. When water ice is used as a refrigerant, it must be packed like a liquid in a sealed, waterproof primary receptacle. The primary receptacle must be surrounded by absorbent cushioning material in a quantity sufficient to take up all water in the event of leakage. The primary receptacle and cushioning material must be securely packed within an outer (shipping) packaging. – Dry ice. When dry ice is used, it must be packaged as required in 349.23. It must NEVER be placed in a sealed container. In addition, sufficient cushioning material must be used so that an inner container will not become loose inside the shipping container as the dry ice sublimates. ■ Salt. The use of salt to retard spoilage can be effective. ■ The mailpiece is properly addressed and marked as required under 221 and DMM 102. |
| GROUP B: Items that must be dried | |
| <p>Dried furs, hides, skins, or pelts of wild animals.</p> | <p>Mailable only when such articles:</p> <ul style="list-style-type: none"> ■ Are properly dried or cured. ■ Have no offensive odor. ■ Are plainly marked and/or labeled on the address side with the full names and addresses of shipper and addressee, together with such endorsement(s) as may be required by state laws. ■ Are securely packaged and/or wrapped to prevent harm to Postal Service employees and damage to the package contents or postal equipment. |

53 Fresh Foods and Other Perishables

Fresh fruits and vegetables are nonmailable unless presented in a dry (not *dried*) condition. Other perishable foods that are capable of easily decomposing or that cannot reach their destination without spoiling are nonmailable. Packaging must be strong and securely sealed as required in DMM 601.1-7.

54 Eggs

Eggs are mailable in domestic mail subject to the following general conditions:

- a. They are individually cushioned.
- b. They are otherwise packed to withstand shocks encountered during normal Postal Service handling.
- c. They are not likely to be harmed by anticipated temperature changes while in Postal Service custody.

55 Meats and Meat Products

Meats and meat products are mailable in domestic mail only when they conform to regulations of the U.S. Department of Agriculture (USDA). Packaging must be strong and securely sealed as required in DMM 601.1-7. If dry ice is used to cool meat or meat products during transport, the dry ice is subject to the mailing conditions in [349.23](#).

56 Plants

561 General

Plants and plant products are mailable within the United States and its territories and possessions, but are subject to certain prohibitions and restrictions imposed by federal agricultural and conservation statutes. When these prohibitions and restrictions render the shipment of any plant or plant product as unlawful, then those plants are nonmailable. For more information, see Publication 14, *Prohibitions and Restrictions on Mailing Animals, Plants, and Related Matter*.

562 Quarantines

Under 39 U.S.C. 3014(b), any plant, plant product, or other article capable of carrying a dangerous plant disease or insect infestation is nonmailable from a quarantined area, if shipping such an item is prohibited by the U.S. Department of Agriculture (USDA) Plant Protection Act issued under 7 U.S.C. 7701. The USDA imposes such quarantines on specific plants to prevent the introduction of agricultural diseases or pests into the United States and to prevent their spread from one part of the United States to another.

USDA quarantine notices, issued under 7 U.S.C. 7701, are published in the *Federal Register* and codified in 7 CFR (e.g., 7 CFR 301 and 318). Details on these and other USDA regulations may be obtained by writing to the USDA Animal and Plant Health Inspection Service (APHIS) Plant Protection and Quarantine (PPQ) Programs (see [564](#) for address).

562.1 Types of Quarantines

There are domestic quarantines that apply to the continental United States; other quarantines that apply to Hawaii, Puerto Rico, and the U.S. Virgin Islands; and others that apply to other territories and possessions.

Any plant or plant matter prohibited under the Act of August 20, 1912 (37 Stat. 315, Chapter 308; 7 U.S.C. 151 et seq.), commonly known as the Plant Protection Act, is made nonmailable by 39 U.S.C. 3015©.

562.2 Specific Information

Plant quarantines cover a great variety of plant diseases and pests, and all areas of the country. For more specific information, consult Publication 14, *Prohibitions and Restrictions on Mailing Animals, Plants, and Related Matter*.

562.3 Inspection

Plants under quarantine by the USDA may be moved from the quarantine area only after being inspected under conditions prescribed in the quarantine notice or in other USDA regulations, issued under 7 U.S.C. 7701, and after a permit or certificate is issued. Refer to ASM 274.9 regarding USDA inspection of mail.

562.4 Penalties**562.41 Nonmailable Items**

Criminal penalties of fine and imprisonment are provided for mailing nonmailable items as follows:

- a. Under 18 U.S.C. 1716B, for anyone who knowingly mails, or causes to be delivered by mail, anything nonmailable pursuant to 39 U.S.C. 3014(b) and the regulations implementing 39 U.S.C. 3014(c).
- b. Under 18 U.S.C. 1716D, for anyone who knowingly mails, or causes to be delivered by mail, anything nonmailable pursuant to 39 U.S.C. 3015(c).

562.42 Forged or Counterfeit Documents

Similar criminal penalties of fine and imprisonment are provided by 18 U.S.C. 1716C as follows:

- a. For anyone who forges or counterfeits any certification authorized by USDA regulations with intent to make such certification appear genuine.
- b. For anyone who makes or knowingly uses, sells, or possesses with intent to use or sell, any such forged or counterfeited certification or any device for imprinting a forged or counterfeited certification.

563 Packaging and Marking**563.1 General**

Wettable packing materials and roots or butts of plants must be wrapped or boxed in a waterproof material. The material must be heavy enough to retain the moisture content needed for the roots of the plants without weakening

the strength of the box, and must be able to withstand Postal Service handling without leakage or loss of the packing material or contents.

Waterproof material means one of the following:

- a. Tar-centered paper.
- b. Kraft paper waxed on one side.
- c. Kraft paper with a waxed or tarred paper liner.
- d. Plastic wrap.

563.2 **Securing Tops of Bundles**

The tops of all bundles must be wrapped with a covering of paper, straw, or similar material to protect the plant from injury or drying out. If the plant has thorns or pointed projections, the wrapper must be puncture proof.

564 **Further Information**

For further information about specific plants or diseases, or about requirements for international shipments, consult the local county agriculture agent or the following federal agency:

ANIMAL AND PLANT HEALTH INSPECTION SERVICE
US DEPARTMENT OF AGRICULTURE
4700 RIVER RD
RIVERDALE MD 20737-1228

57 Nonmailable Plant Pests, Injurious Animals, and Illegally Taken Fish or Wildlife

571 **General**

Under the respective provisions in 39 U.S.C. 3015(a), (b), or (d), the following items are nonmailable:

- a. Any injurious animal, the importation or interstate shipment of which is prohibited under 18 U.S.C. 42.
- b. Any plant pest, the movement of which is prohibited under section 103 or 104 of the Federal Plant Pest Act (7 U.S.C. 150bb or 150cc).
- c. Any fish or wildlife, the conveyance of which is prohibited under section 3 of the Lacey Act Amendments of 1981 (16 U.S.C. 3372).

For more information, see Publication 14, *Prohibitions and Restrictions on Mailing Animals, Plants, and Related Matter*.

572 **Criminal Penalties**

Criminal penalties are specified in 18 U.S.C. 1716d for mailing anything that is nonmailable under 39 U.S.C. 3015(a), (b), or (d).

6 International Mail

61 General

This chapter contains regulations on the mailability of hazardous materials, restricted matter, and perishable matter that may be sent as international mail. Additional information on these subjects is contained in Chapters [3](#), [4](#), and [5](#), and in *Mailing Standards of the United States Postal Service*, International Mail Manual (IMM) 135–138.

611 Refusal by Air Carrier

Mailpieces refused by an air carrier that contain, or are suspected to contain, hazardous, restricted, or perishable materials, must be handled in accordance with [711](#).

62 Hazardous Materials: International Mail

621 General Requirements

621.1 Mailing Conditions

In international commerce, the term “dangerous goods” is commonly used to describe hazardous materials.

Almost all hazardous materials are prohibited in international mail. The only mailable hazardous materials are certain infectious substances, excepted quantities of radioactive material that are allowed in domestic mail, certain magnetized materials, and certain lithium and lithium-ion batteries. See [Exhibit 621.1](#) for a summary of the types of hazardous materials that are eligible for mailing in international mail.

In certain situations, the few types of hazardous materials that are generally permitted in international mail may be further restricted by the mailing limitations imposed by an individual country. Because individual countries have unique prohibitions and restrictions, it is always necessary to consult the Individual Country Listings in the IMM to be certain that an otherwise mailable hazardous material is acceptable for shipment to a specific country.

Exhibit 621.1

DOT Hazard Classes and Mailability for International Mail

| Hazard Class | Name of Hazard Class (and Division when applicable) | International Mail APO/FPO/DPO | |
|--------------|---|--|---|
| | | Air Transportation | Surface Transportation |
| 1 | Explosives | Prohibited | Prohibited |
| 2 | Gases | Prohibited | Prohibited |
| 3 | Flammable and Combustible Liquids | Prohibited | Prohibited |
| 4 | Flammable Solids | Prohibited | Prohibited |
| 5 | Oxidizing Substances, Organic Peroxides | Prohibited | Prohibited |
| 6 | Toxic Substances and Infectious Substances | | |
| | Division 6.1: Toxic Substances | Prohibited | Prohibited |
| | Division 6.2: Infectious Substances | Only via First-Class Package International Service with Registered Mail service per limits in 622.2 and IMM 135.1. | Prohibited |
| 7 | Radioactive Materials | Only via First-Class Package International Service using Registered Mail service per limits in 622.3 and IMM 135.5. | Prohibited |
| 8 | Corrosives (liquids and solids) | Prohibited | Prohibited |
| 9 | Miscellaneous Hazardous Materials | Prohibited, except for magnetized materials per 622.4 and lithium or lithium-ion batteries per 622.5 | Prohibited, except for magnetized materials per 622.4 and lithium batteries per 622.5 |

621.2 Hazard Classes

The nine classes of hazardous materials listed in [331](#) also apply to dangerous goods shipped in international commerce.

The non-Postal Service regulations that govern the air shipment of hazardous materials (dangerous goods) in international commerce are specified in the *Technical Instructions for the Safe Transport of Dangerous Goods by Air* of the International Civil Aviation Organization (ICAO). In 49 CFR, DOT recognizes ICAO requirements for the air transportation of hazardous materials. However, 49 CFR gives DOT the authority to regulate only the domestic transportation of hazardous materials. Generally, most air carriers follow the *Dangerous Goods Regulations* of the International Air Transport Association (IATA), and those regulations are slightly more restrictive than the ICAO rules.

621.3 Limited Quantity Air and Limited Quantity Ground

The Limited Quantity air and Limited Quantity surface category is unique within domestic commerce and specific to the Postal Service networks. These categories are not recognized in international commerce. Hazardous materials under these classifications that are mailable in domestic mail are typically prohibited in international mail.

621.4 APO/FPO/DPO Mail

Hazardous, restricted, or perishable materials mailed to, from, and between overseas military Post Offices are subject to the conditions of IMM 130, the standards in this publication, conditions prescribed by the Department of State international security policy, and conditions prescribed by the Department of Defense (DOD), as listed in *Overseas Military/Diplomatic Mail* in the *Postal Bulletin*. Also see DMM 703.2-4.

622 Mailable Hazardous Materials**622.1 General**

As shown in [Exhibit 621.1](#), almost all hazardous materials are prohibited in international mail. Under specific circumstances, only biological substances, limited amounts of radioactive materials, and certain magnetized materials are eligible to be sent in international mail.

622.2 Biological Substances, Division 6.2

Infectious and noninfectious biological substances are permitted in international mail subject to the provisions that apply to domestic mail in [346.2](#). In addition, the following requirements apply:

- a. Biological substances are prohibited from international mail by certain countries. To determine if a prohibition exists for a specific country, check the Individual Country Listings in the IMM.
- b. Mailable infectious substances must only be sent via First-Class Package International Service using Registered Mail service. Nonregulated materials defined in [346.234](#) and exempt human or animal specimens defined in [346.12d](#) are mailable when properly packaged as described in [346.32](#).
- c. Biological substances can be sent to or received by only the following types of institutions when permission has been granted:
 - (1) Laboratories of local, state, and federal government agencies.
 - (2) Laboratories of federally licensed manufacturers of biological products derived from bacteria and viruses.
 - (3) Laboratories affiliated with or operated by hospitals, universities, research facilities, and other teaching institutions.
 - (4) Private laboratories licensed, certified, recognized, or approved by a public authority.

Permission to mail biological substances must be obtained prior to mailing. Qualifying institutions wishing to mail biological substances must submit a written letter of application on its organizational letterhead to the following address:

MANAGER PRODUCT CLASSIFICATION
US POSTAL SERVICE
475 L' ENFANT PLZ SW RM 4446
WASHINGTON DC 20260-4446

The application must state the institution's nature of work, the identity and qualifications of the prospective recipient, and the number of packages to be mailed.

- d. Mailable infectious substances are limited to 50 ml for liquids or 50 g for solids, per mailpiece, and must be packaged in accordance with Packaging Instruction 6C in Appendix [C](#), and the additional requirements in IMM 135.31 and 135.41.
- e. Nonregulated materials and exempt human or animal specimens must be packaged in accordance with Packaging Instructions 6G and 6H in Appendix [C](#), and the additional requirements in IMM 135.32 and 135.42.
- f. A shipper's declaration for dangerous goods is required. See [326](#) and [725.3](#).

622.3 **Radioactive Materials, Class 7**

Class 7 radioactive materials are permitted in international mail subject to the limits in [347](#) and the following conditions:

- a. Radioactive materials may be sent only to those countries that have expressed a willingness to accept them. For specific details, consult the Individual Country Listings in the IMM.
- b. Each radioactive materials shipment must be sent only by First-Class Package International Service with Registered Mail service.
- c. Mailable radioactive materials may not have an activity content that exceeds one-tenth of the limits in Exhibit 347.22.
- d. Each shipment must comply with both the International Atomic Energy Agency Regulations and the specifications contained in [347](#) and this section.
- e. Mailable radioactive materials must be packaged in accordance with Packaging Instruction 7A in Appendix [C](#) and the requirements specified in IMM 135.5.
- f. The sender and recipient of each radioactive materials shipment must receive prior authorization from the appropriate regulatory authorities within their countries.
- g. A white package label bearing the French words "Matieres Radioactives" (Radioactive Materials) must be securely affixed, taped, or gummed to the address side of each mailpiece containing radioactive materials. The sender is responsible for supplying and affixing this label to the mailpiece.
- h. The address side of each mailpiece must bear the following endorsements in bold letters: "Return to Sender in Case of Nondelivery" and "Radioactive Materials, Quantities Permitted for Movement by Post."
- i. A shipper's declaration for dangerous goods is required. See [326](#) and [725.3](#).

622.4 Magnetized Materials

Magnetized materials, as defined in [349.24](#), are prohibited in international mail except for those that cannot cause a compass deviation at a distance of 7 feet or more. Mailable magnetized materials must be prepared for mailing following Packaging Instruction 9B in Appendix [C](#).

622.5 Lithium and Lithium-ion Cells and Batteries — General

Only lithium batteries under [622.51](#) and [622.52](#) that are properly installed in the equipment they operate may be sent internationally or to and from an APO, FPO, or DPO location (subject to the conditions prescribed by the Department of Defense listed in *Overseas Military/Diplomatic Mail* in the *Postal Bulletin*). Lithium batteries that are *packed with* the equipment or lithium batteries *sent separately* from equipment are prohibited. Damaged or recalled batteries are prohibited and may not be mailed internationally under any circumstances.

The following restrictions also apply:

- a. The batteries must be installed in the equipment being shipped.
- b. The equipment must be cushioned to prevent movement or damage and must be contained in rigid outer packaging, sealed and strong enough to prevent crushing of the package or exposure of the contents during normal handling in the mail.
- c. A lithium battery consignment, as defined in 349.12b, is limited to a maximum of two mailpieces for all international and APO/FPO/DPO mailings.

622.51 Lithium Metal (Non-Rechargeable) Cells and Batteries

Small consumer-type lithium metal cells or batteries (lithium metal or lithium alloy) like those used to power cameras and flashlights are mailable in a single shipment with the following restrictions:

- a. Each shipment may contain a maximum of four lithium cells or two lithium batteries.
- b. The lithium content must not exceed 1 gram (g) per cell.
- c. The total aggregate lithium content must not exceed 2 g per battery.
- d. The batteries installed in the equipment must be protected from damage and short circuit.
- e. The equipment must be equipped with an effective means of preventing it from being inadvertently turned on or activated.
- f. Mailpieces must not bear markings or labels identifying the contents as lithium batteries.

622.52 Lithium-ion (Rechargeable) Cells and Batteries

Small consumer-type lithium-ion cells and batteries like those used to power cell phones and laptop computers are mailable in a single shipment with the following restrictions:

- a. Each shipment may contain a maximum of four lithium-ion cells or two lithium-ion batteries.
- b. The watt-hour rating must not exceed 20 Wh per cell.
- c. The watt-hour rating must not exceed 100 Wh per battery.
- d. Each battery must bear the “Watt-hour” or “Wh” marking on the battery to determine if it is within the limits defined in items b and c.
- e. The batteries installed in the equipment must be protected from damage and short circuit.
- f. The equipment must be equipped with an effective means of preventing it from being inadvertently turned on or activated.
- g. Mailpieces must not bear markings or labels identifying the contents as lithium batteries.

622.53 Very Small Lithium Metal and Lithium-ion Cells and Batteries

Each shipment containing very small lithium batteries, when installed in the equipment they operate (including circuit boards), may contain a maximum of four lithium cells or two lithium batteries. Very small cells/batteries are mailable internationally with the following conditions:

- a. Each lithium metal cell and battery must contain no more than 0.3 gram of lithium content.
- b. Each lithium-ion cell/battery must have a watt-hour rating of not more than 2.7 Wh.
- c. Mailpieces must not bear markings or labels identifying the contents as lithium batteries.

Exhibit 622.5

International Lithium Battery Mailability

| | International APO/FPO/DPO¹ | Mailpiece Battery Limit² |
|--|--|--|
| Lithium Metal or Lithium Alloy Batteries^{3, 4} | | |
| <i>Small, non-rechargeable, consumer-type batteries</i> | | |
| Contained in (properly installed in equipment) | Mailable | Maximum of 4 cells or 2 batteries |
| Packed with equipment, but not installed in the equipment | Prohibited | |
| Without the equipment they operate (individual batteries in originally sealed packaging) | Prohibited | |
| Lithium-ion or Lithium Polymer Batteries^{5, 6} | | |
| <i>Small, rechargeable, consumer-type batteries</i> | | |
| Contained in (properly installed in equipment) | Mailable | Maximum of 4 cells or 2 batteries |
| Packed with equipment, but not installed in the equipment | Prohibited | |
| Without the equipment they operate (individual batteries in originally sealed packaging) | Prohibited | |
| Very Small Lithium Metal or Lithium-ion Batteries^{7, 8} | | |
| <i>Exception for very small consumer-type batteries in international transportation</i> | | |
| Contained in (properly installed in equipment) | Mailable | Maximum of 4 cells or 2 batteries |
| Packed with equipment, but not installed in the equipment | Prohibited | |
| Without the equipment they operate (individual batteries in originally sealed packaging) | Prohibited | |

¹ Unless otherwise prohibited by the international destination country or specific APO/FPO/DPO ZIP Code location.

² When a mailpiece limitation of 4 cells or 2 batteries is applicable, a mailpiece may contain either 4 cells or 2 batteries, not both.

³ Each lithium metal or lithium alloy cell must not contain more than 1g lithium content.

⁴ Each lithium metal or lithium alloy battery must not contain more than 2g of aggregate lithium content.

⁵ Each lithium-ion or lithium polymer cell must not exceed more than 20 Wh (watt-hour rating).

⁶ Each lithium-ion or lithium polymer battery must not exceed 100 Wh.

⁷ Each lithium metal or lithium alloy cell or battery must not exceed 0.3 gram of lithium content.

⁸ Each lithium-ion or lithium polymer cell or battery must not exceed a watt-hour rating of 2.7 Wh.

Note: Shipments containing lithium batteries are not permitted in Global Express Guaranteed mailpieces.

623 Nonmailable Hazardous Materials

The following types of hazardous materials, as defined in Chapter [3](#), and IMM 135–136, are prohibited in international mail:

- a. Class 1, explosives (including explosive devices) [\(341\)](#).
- b. Class 2, gases [\(342\)](#).
- c. Class 3, flammable and combustible liquids [\(343\)](#).
- d. Class 4, flammable solids including matches [\(344\)](#).
- e. Class 5, oxidizing substances and organic peroxides [\(345\)](#).
- f. Class 6, Division 6.1, toxic substances (including irritants) [\(346\)](#).
- g. Class 6, Division 6.2, infectious substances [\(346\)](#), except as permitted in [622.2](#).
- h. Class 7, radioactive materials [\(347\)](#), except as permitted in [622.3](#).
- i. Class 8, corrosives [\(348\)](#).

- j. Class 9, miscellaneous hazardous materials (349).
- k. Dry ice (carbon dioxide solid) (349.23).
- l. Magnetized materials capable of causing a compass deviation at a distance of 7 feet or more (349.24). See 622.4 for mailable magnetized materials.

63 Restricted Matter: International Mail

631 APO/FPO/DPO Mail

Hazardous, restricted, or perishable materials mailed to, from, and between overseas military Post Offices are subject to the conditions of IMM 130, the standards in this publication, conditions prescribed by the Department of State international security policy, and conditions prescribed by the Department of Defense (DOD), as listed in *Overseas Military/Diplomatic Mail* in the *Postal Bulletin*. Also see DMM 703.2-4.

632 Firearms

The requirements and prohibitions that apply to the mailing of firearms in domestic mail, as stated in Chapter 4, also apply to international mail subject to any restrictions in the Individual Country Listings in the IMM.

- a. Nonautomatic and semiautomatic rifles, carbines, revolvers, and pistols (regardless of caliber), except those of .50 caliber or less manufactured before 1898.
- b. Shotguns with barrels less than 18 inches long.
- c. All machine guns, submachine guns, machine pistols, and fully automatic rifles.

To obtain an export license, mailers should contact the following federal agency:

U.S. DEPARTMENT OF STATE
PM/DTC STE 1200 SA-1
2401 E ST NW
WASHINGTON DC 20037-2915

Telephone: 202-663-2980

In addition, see IMM 540 for U.S. Department of State licensing requirements applicable to the international mailing of arms or implements of war, component parts, and related technical data.

632.1 Export to APOs/FPOs/DPOs

Export of firearms to certain specified overseas military or diplomatic Post Offices (APOs/ FPOs/DPOs) is prohibited. To determine if the mailing of firearms to a specific APO, FPO, or DPO is prohibited, refer to the table titled "Overseas Military/Diplomatic Mail," which is published periodically in the *Postal Bulletin*. Footnote F of this table lists the restrictions for mailing firearms. If the destination military or diplomatic Post Office permits the shipment of firearms (meaning no Footnote F restriction is assigned to the specific APO, FPO, or DPO ZIP Code), the mailer must present an export license obtained from the regional Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) office.

632.2 Import

Under the following conditions, members of the armed forces may mail rifles or shotguns without an import permit:

- a. Incident to a permanent change of duty or release from active duty, any member of the armed forces who has been stationed on active duty outside the United States for the preceding 60 days may, without an import permit, present up to three rifles or shotguns that are mailable to the appropriate armed forces transportation officer to be forwarded to the member's residence as unaccompanied baggage officially shipped through the mail. Firearms imported in this manner must be intended for the member's personal use.
- b. Any member of the armed forces who wishes to import more than three mailable firearms must prepare ATF Form 6, *Application and Permit for Importation of Firearms, Ammunition, and Implements of War*, and must comply with the Defense Transportation Regulation 4500.9-r and other appropriate military directives.
- c. The three-firearm limitation does not apply to mailable firearms for which the member of the armed forces has proof of prior ownership in the United States. A member may personally mail these other firearms back into the United States, or to any of its possessions, if the member can establish to the satisfaction of the U.S. Customs Service that he or she previously took the firearms out of the United States or any of its possessions.
- d. Any member of the armed forces importing firearms under a, b, or c of this section must prepare ATF Form 6A, *Release and Receipt of Imported Firearms, Ammunition, and Implements of War*, under 27 CFR 178.114(b). In addition, the member's authorized agent must furnish this form and associated certification to the customs officer releasing the firearms.

633 Inert Replica and Explosive Devices

The following types of replica or inert explosive devices are prohibited in international mail:

- a. Military ordnance, ammunition, and shells.
- b. Grenades.
- c. Similar devices that were originally designed for military or combative use (including training).

634 Knives and Sharp Instruments

Knives and sharp instruments permitted to be mailed in domestic mail may be mailed in international mail as permitted in the conditions specified for the Individual Country Listings in the IMM.

635 Drugs

Drugs that are admissible in domestic mail (see Chapter 4) are also acceptable in international and APO/FPO/DPO mail, provided there is no specific exclusion by the destination country or military or diplomatic Post Office.

636 **Controlled Substances**

Controlled substances are not permitted in international mail. Controlled substances addressed to APO/FPO/DPO destinations are subject to the prohibitions in DMM 703.2.3 or 703.3.2, in addition to all requirements that apply to domestic mail, as contained in Chapter [4](#).

637 **Other Restricted Matter**

Materials that are nonmailable domestically are also prohibited in international mail. The restricted materials include, but are not limited to, intoxicating liquor; matter emitting obnoxious odor, motor vehicle master keys, odd-shaped items sent in letter-size envelopes, abortive and contraceptive devices, and certain building construction material. See IMM 135 and 136 for other general restrictions and prohibitions, and the Individual Country Listings in the IMM for specific country restrictions and prohibitions.

64 Perishable Matter: International Mail

641 **APO/FPO/DPO Mail**

Hazardous, restricted, or perishable materials mailed to, from, and between overseas military or diplomatic Post Offices are subject to the conditions of IMM 130, the standards in this publication, conditions prescribed by the Department of State international security policy, and conditions prescribed by the Department of Defense (DOD), as listed in *Overseas Military/Diplomatic Mail* in the *Postal Bulletin*. Also see DMM 703.2-4.

642 **Animals**

Most live or dead animals are nonmailable in international mail. Animals mailed to the Republic of Palau, the Republic of the Marshall Islands, and the Federated States of Micronesia require a permit issued by the government of the destination country.

When permitted by the destination country, only the following types of animals are mailable:

- a. Live bees, leeches, silkworms, and flies of the family Drosophilidae.
- b. Thoroughly dried dead insects or reptiles.
- c. Parasites and predators of injurious insects, provided all of the following conditions are met:
 - (1) The parasites and predators of injurious insects are permitted in domestic mail.
 - (2) They are useful in controlling harmful insects.
 - (3) They are exchanged by officially recognized scientific or health agencies.
 - (4) They are sent by First-Class Mail International service, First-Class Package International Service, or Priority Mail International Flat Rate Envelopes or Small Flat Rate Priced Boxes.

- (5) They are securely packaged in containers conforming to the requirements for domestic mail.

643 Eggs

643.1 Fresh Eggs

Eggs may be mailed in international mail via Priority Mail International service only as follows:

- a. For shipments to all countries except Canada, eggs must be packed in the following manner:
 - (1) Each egg must be packed in sufficient cushioning material.
 - (2) Eggs must be shipped in a metal egg container.
 - (3) The metal egg container must be enclosed in an outer container of wood with sufficient cushioning material packed between the inner and outer containers.
- b. For shipments to Canada, eggs must be packed in the following manner:
 - (1) Each egg must be wrapped in protective material and placed on end.
 - (2) Eggs must be either packed in the manner prescribed for other countries in [643.1a](#) or packed in a wooden, papier-mâché, or other box of rigid material having a well-fitting, tightly adjusted lid.
 - (3) Vacant space in the box must be filled with packing material to prevent eggs from striking together or against the sides, top, or bottom of the box.

643.2 Dried Whole Eggs

643.21 Commodity Credit Corporation Endorsement

Dried whole eggs purchased under the USDA's Commodity Credit Corporation program must carry an endorsement by the exporter or authorized representative waiving any right to withdraw the parcel from the mail or to have it returned. The endorsement must be written or stamped on the address side of each mailpiece. These mailings may be made by Priority Mail International service only.

643.22 Certificate

A certificate using the format shown in IMM Exhibit 553.121 (and repeated here as [Exhibit 643.22](#)) must be prepared and completed by the sender, and presented at the time of mailing. The following conditions also apply:

- a. A single certificate may cover any number of mailpieces presented by the same sender and in the same mailing, even if the mailpieces are addressed to different countries.
- b. A charge (see IMM 552) is made for each certificate or each parcel (if a single certificate covers more than one parcel).
- c. Postage to cover the certificate charge must be affixed to the certificate and canceled with the postmark of the office of mailing.
- d. After being postmarked, the certificate must be signed by the postmaster (or designee) and returned to the sender.

Exhibit 643.22

Certificate of Mailing Dried Whole Eggs

| | |
|--|---|
| CERTIFICATE OF MAILING DRIED WHOLE EGGS | |
| <p>I hereby certify that there has (have) been posted at this Post Office facility today by (Sender), parcels containing a total of (Number) pounds of dried whole eggs on which the sender has waived the right to withdraw same from the mail or have same returned.</p> | |
| <p>Parcels addressed to</p> | |
| <hr style="width: 80%; margin: 0 auto;"/> <p>(Name and addresses of addressees)</p> | |
| <hr style="width: 80%; margin: 0 auto;"/> <p>(Office stamp) (Date)</p> | <hr style="width: 80%; margin: 0 auto;"/> <p>(Postmaster)</p> |
| <hr style="width: 80%; margin: 0 auto;"/> <p>By</p> | |

644 **Plants**

Plants, seeds, and plant materials, including fruits and vegetables, are subject to the provisions for domestic mail in section 56, Publication 14, *Prohibitions and Restrictions on Mailing Animals, Plants, and Related Matter*, and the quarantine regulations of the country of destination. Customers can obtain information from the U.S. Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS) Plant Protection and Quarantine (PPQ) Programs at:

USDA APHIS PPQ
4700 RIVER RD
RIVERDALE MD 20737-1228

645 **Fresh Foods and Other Perishables**

Fresh meats, fruits, vegetables, and other items that are capable of easily decomposing or cannot reasonably be expected to reach their destination without spoiling are nonmailable in international mail. Consult the Individual Country Listing in the IMM for specific restrictions or prohibitions.

7 Air Transportation Requirements

71 General

This chapter contains standards on the mailability of hazardous materials, restricted matter, and perishable matter in domestic mail via air transportation. (For international and APO/FPO/DPO mail, see Chapter [6](#).)

Full compliance with the regulations governing the shipment of harmful matter by air transportation is essential because these materials can endanger postal employees, airline passengers and personnel, aircraft equipment, and postal equipment and facilities.

For the purposes of this chapter, air transportation requirements apply to all mailable hazardous materials, restricted matter, and perishable matter sent via Priority Mail Express, Priority Mail, First-Class Mail, or First-Class Package Service.

711 Refusal by Air Carrier

711.1 Air Carrier Policy or Pilot's Decision

Although a mailpiece containing a mailable hazardous, perishable, or restricted material may be properly prepared for air transportation under Postal Service mailing requirements, an individual pilot may refuse it. Nonmailable or improperly prepared mailpieces can also be rejected by an air carrier when tendered for shipment. Refusals can result from the following situations:

- a. The air carrier is not authorized to carry hazardous materials under the provisions of the Federal Aviation Administration (FAA) Operator's Certificate.
- b. The air carrier's corporate policy prohibits carrying hazardous or restricted materials.
- c. The pilot of an individual flight rejects any mailpieces perceived as questionable or unsafe. Pilots have the right to refuse the boarding and transport of questionable articles that could interfere or prevent the safe operation of the aircraft under Federal Air Regulations (FAR).
- d. The mailpiece contains a nonmailable hazardous or restricted material that was mistakenly accepted or deposited in the mailstream.
- e. The mailpiece is not properly packaged, marked, or labeled for air transportation.

- f. The mailpiece does not carry a properly completed shipper's declaration for dangerous goods.
- g. The mailpiece is unidentified as to its contents and appears to contain a hazardous or restricted material.
- h. The air carrier refuses a mailable shipment of live animals or other mailable articles of perishable matter because of its company policy on safety or current extreme temperature conditions.

711.2 **Handling of Mailpieces Refused by an Air Carrier**

All mailpieces containing hazardous, restricted, or perishable materials that are refused by an air carrier must be handled as follows:

- a. If the mailpiece is damaged or leaking, contact the local facility's safety officer or designee for assistance. The procedures in the facility's Spill/Leak SOP and Handbook EL-812 must be followed.
- b. An online Mailpiece Incident Report (MIR) is required to be completed and filed in accordance with the instructions in the Safety Toolkit, based on the incident type. Types of incidents may include spills, leaks, or hazardous, restricted, or perishable material that has been rejected by an air carrier.
- c. If the mailpiece contains a nonmailable or improperly packaged hazardous or restricted material, a nonmailable or improperly packaged animal or other perishable matter, immediately follow the reporting procedures in POM 139.117-118 and the Aviation Mail Security Hazardous Materials Program Instructions, as applicable. Additionally, to prevent future shipments from being incorrectly accepted for mailing, notify the mailer and the mailing Post Office of the problem.
- d. If the mailpiece contains a mailable hazardous or restricted material that is properly packaged, labeled, and marked, attempt to contact the mailer. If the mailer can be reached, advise the mailer that the item has been refused by the air carrier and offer to divert to surface transportation or return to sender. If the mailer agrees to divert to surface, apply Label 127, *Surface Transportation Only*, and immediately dispatch the mailpiece to the destination via the most expeditious means of surface transportation.
- e. If the mailer cannot be contacted, or if the mailer does not wish to have the mailpiece rerouted via surface transportation, or if the mailpiece cannot be rerouted via surface transportation to the delivery address, do the following:
 - (1) Affix Label 180, *Rejected by Air Carrier*, or endorse the address side of the mailpiece "Refused for Air Transportation by Air Carrier" and note the name of the airline, flight number, and reason for refusal.
 - (2) Correct the markings on the mailpiece to read "Surface Mail Only," and return the mailpiece to the sender via surface transportation (if permitted).

- (3) Apply Label 127, *Surface Transportation Only*, and immediately dispatch the mailpiece to the destination via the most expeditious means of surface transportation.
 - (4) Provide the mailer with instructions on how to obtain a refund of the postage charges because service was not provided, and the item was determined to be mailable.
 - (5) Complete PS Form 2759, *Report of Irregular Handling of Mail*, for internal Postal Service information only, and distribute copies to the appropriate Postal Service offices. Do not send a copy to the mailer. Include the name and address of the mailer, the type and amount of hazardous material, and the reason for the air carrier's refusal.
- f. If the mailpiece contains mailable animals that cannot be delivered to the addressee or returned to the sender via surface transportation within 72 hours (for live day-old poultry), or within the delivery period marked on the mailpiece (for other animals), immediately dispose of it. For safety reasons, dispose of mailpieces not marked with a delivery period when it reasonably appears the articles could not be delivered or returned in a viable condition. Also dispose of, or donate to a charitable institution, any perishable matter that cannot be returned in a viable condition. See POM 691.52 for disposal information.
- g. If the mailpiece contains a mailable animal or other article of perishable matter that appears to be viable and can be delivered within the specified delivery period, attempt to contact the mailer via information from the return address. If the mailer can be reached, advise the mailer of the available option for rerouting the mailpiece via the most expeditious means of surface transportation (if available). If the mailer agrees to divert to surface, apply Label 127, *Surface Transportation Only*, and immediately dispatch the mailpiece to the destination via the most expeditious means of surface transportation.
- h. If the mailer of a parcel containing a mailable animal or other article of perishable matter (that appears to be in a viable condition) cannot be contacted, and the mailpiece can be returned to the sender within the specified delivery period, do the following:
- (1) Affix Label 180, *Rejected by Air Carrier*, or endorse the address side of the mailpiece "Refused for Air Transportation by Air Carrier" and note the name of the airline, flight number, and reason for refusal.
 - (2) Apply Label 127, *Surface Transportation Only*, and immediately return the mailpiece to the sender via the most expeditious means of surface transportation.
 - (3) Provide the mailer with instructions on how to obtain a refund of the postage charges because service was not provided, and the item was determined to be mailable.

72 Hazardous Materials: Air Transportation

721 General Requirements

For domestic mail sent via air transportation, a mailpiece containing a hazardous material must:

- a. Consist of a material that is permitted to be transported by air.
- b. Be prepared and packaged under all applicable conditions for transport by air.
- c. Be sent by Priority Mail Express, Priority Mail, First-Class Mail, or First-Class Package Service.

Hazardous materials are not acceptable for air transportation if they are not prepared in compliance with the specific applicable requirements. These requirements consider the degree of hazard, quantity of material, method of packaging, required shipping papers, and adequacy of labels and/or markings required for carriage aboard an aircraft.

Chapter 3 and the Packaging Instructions in Appendix C, provide full details of the conditions under which mailable hazardous materials may be sent in domestic mail via air transportation.

722 Additional Requirements

722.1 APO/FPO/DPO Mail

Hazardous, restricted, or perishable materials mailed to, from, and between overseas military or diplomatic Post Offices are subject to the conditions of IMM 130, the standards in this publication, conditions prescribed by the Department of State international security policy, and conditions prescribed by the Department of Defense (DOD), as listed in *Overseas Military/Diplomatic Mail* in the *Postal Bulletin*. Also see Chapter 6 and DMM 703.2 for information on air transportation and other restrictions affecting APO/FPO/DPO, SAM, and PAL service.

722.2 ZIP Codes Served Only by Air Transportation

Hazardous materials that are prohibited from mailing via air transportation cannot be mailed to any ZIP Code that is serviced only by air transportation (e.g., certain ZIP Codes in Alaska).

722.3 Air Transportation Prohibitions

The following types of hazardous materials are prohibited from transport via aircraft under any circumstances:

- a. Explosives.
- b. Anything susceptible to damage or that can become harmful because of changes in temperature or atmospheric pressures, unless protected against the effects of such changes.
- c. Magnetic material that has a field strength sufficient to cause a compass deviation at a distance of 7 feet or more from any point on the outer packaging.

- d. Flammable materials (gases, liquids, and solids).
- e. Radioactive materials.
- f. Hazardous materials excluded from air shipment by the regulations of 49 CFR 100-185, or by the applicable country or air carrier operator variations.

723 **Hazardous Materials Warning Labels**

See [325](#) for information on hazardous materials warning labels. Parcels displaying any of the DOT warning labels shown in [Exhibit 325.2](#) are prohibited because items required to bear those warning labels contain hazardous materials or quantities of hazardous materials that possess too great a risk to be safely handled in the mail. Parcels displaying any of the labels shown in [Exhibit 325.3a](#) are permitted to be mailed within specific limits set by the Postal Service and as defined in Chapter [3](#).

724 **Consumer Commodity and Mailable Limited Quantity Materials**

Hazardous materials permitted to be sent in domestic mail via air transportation must qualify as consumer commodity materials or air-eligible mailable limited quantity materials, except for the few materials specified in [322](#) and [Exhibit 331](#). See [333](#) and [334](#) for more information on air-eligible hazardous materials.

To be acceptable for air transportation, a consumer commodity material or mailable limited quantity materials must be eligible for shipment via air and must be properly packaged and marked. The mailpiece must also bear a shipper's declaration for dangerous goods as required in [326](#) and [725.3](#).

725 **Mailer Responsibility**

725.1 **General**

Full responsibility rests with the mailer to comply with all Postal Service and non-Postal Service laws and regulations regarding the mailing of hazardous materials. Anyone who mails, or causes to be mailed, a nonmailable or improperly packaged hazardous material can be subject to legal penalties, including, but not limited to, those specified in 18 U.S.C.

725.2 **Warning Labels and Marking Requirements**

Except as noted, hazardous materials acceptable for air transportation generally fall within the consumer commodity or mailable limited quantity categories. Mailpieces containing these materials and intended for air transportation have specific marking requirements, including the use of certain DOT hazard class warning labels. Some air-eligible mailable hazardous materials also have marking and packaging requirements that are unique to mailpieces entered under these exceptions (e.g. SP 9275, certain

mailable infectious substances and medical waste, and dry ice). Mailable hazardous material must bear DOT handling labels (such as orientation arrows, magnetized materials, etc.) when applicable. The following also apply:

- a. Mailpieces containing air-eligible materials in hazard Classes 2, 3, and 6.1, or portions of 9 must bear DOT square-on-point markings and an approved DOT Class 9 hazardous material warning label (see [Exhibit 325.3b](#)). The top and bottom portions of the square-on-point and the border forming the square-on-point must be black, and the center must be white or of a suitable contrasting background. The symbol “Y” must be black, located in the center of the square-on-point, and clearly visible. Mailpieces must also be marked with the proper shipping name “Consumer Commodity” and identification number “ID8000.” A shipper’s declaration for dangerous goods, prepared in triplicate, must be affixed to the outside of the mailpiece.
- b. Mailpieces containing air-eligible materials in hazard Classes 5.1, 5.2, or 8 must bear a DOT square-on-point marking and the appropriate approved DOT Class 5.1, 5.2, or 8 hazardous material warning label. The top and bottom portions of the square-on-point and the border forming the square-on-point must be black, and the center must be white or of a suitable contrasting background. The symbol “Y” must be black, located in the center of the square-on-point, and clearly visible. Mailpieces must also be marked with the appropriate identification number and the proper shipping name. A properly completed shipper’s declaration for dangerous goods must be affixed to the outside of the mailpiece.
- c. Markings must be durable, legible, and readily visible, and must be applied on at least one side or one end of the outer packaging. The border forming the square-on-point must be at least 2 mm in width, and the minimum dimension of each side must be 100 mm, unless the package size requires a reduced size marking of no less than 50 mm on each side.

725.3 Shipping Papers

Most mailable hazardous materials (including consumer commodity materials or mailable limited quantity materials) must be accompanied by a Shipper’s Declaration for Dangerous Goods (shipping paper, see [326](#)). To determine which mailable hazardous materials require a shipping paper when sent via air transportation, refer to the appropriate sections in Chapter [3](#), and the appropriate Packaging Instruction in Appendix [C](#).

The shipping paper must be properly completed and signed in triplicate by the mailer. It must bear a red candy-striped border and the exact format and same basic wording as shown in [Exhibit 326](#). The shipper’s declaration must be properly prepared, as required by 49 CFR 172.200 through 172.205, which, in part, requires the following information:

- a. Proper shipping name of material.
- b. Hazard class.
- c. UN or NA identification number, as applicable.
- d. The quantity and type of packaging.

- e. The packaging instruction used.
- f. The full name, address, and telephone number of the shipper or consignee.
- g. The signed shipper's certification statement.

Neither the Postal Service nor DOT stocks or furnishes shipper's declaration forms. Mailers may obtain them from commercial printers, Internet-based retailers, safety supply stores, or stationery stores.

725.4 **Addressing**

The full names and addresses of both the sender and the addressee must appear legibly on the address side of the mailpiece, in accordance with DMM 602.

726 **Postal Service Handling**

726.1 **Acceptance Personnel**

In addition to the basic guidelines in [251](#), acceptance personnel must follow the Aviation Mail Security Hazardous Materials Program Instructions for the acceptance of hazardous materials. Ensure the following:

- a. Each mailpiece presented contains a mailable hazardous material that is properly packaged and labeled.
- b. If required, the mailpiece bears the required shipper's declaration for dangerous goods (see [326](#) and [725.3](#)).
- c. The mailpiece is eligible for air transportation and mailed as Priority Mail Express, Priority Mail, First-Class Mail, or First-Class Package Service, as permitted.

Note: For safety reasons, mailpieces containing hazardous materials that are not eligible for air transportation cannot pay postage at an Priority Mail Express, Priority Mail, First-Class Package Service, or First-Class Mail price, and must be marked "Surface Mail" or "Surface Mail Only."

726.2 **Dispatch Personnel**

In addition to the basic guidelines in [252](#), Postal Service personnel involved with mail dispatch via air transportation must follow the Aviation Mail Security, Hazardous Materials Program Instructions and the POM. These policy statements provide interim field instructions for handling mailpieces containing hazardous materials within mail processing areas and the proper tendering of such mail to the air carriers.

727 **Refusal by Air Carrier**

Mailpieces refused by an air carrier that contain hazardous material, or are suspected to contain hazardous materials, must be handled in accordance with [711](#).

727.1 Nonmailable or Improperly Prepared Mailpieces

Mailpieces containing nonmailable or improperly packaged hazardous materials that were inadvertently accepted for mailing should be stopped where identified and not presented to an air carrier. They should be handled in accordance with the Aviation Mail Security Hazardous Materials Program Instructions. Additionally, to prevent future shipments from being incorrectly accepted for mailing, notify the mailer and the Post Office of mailing of the problem.

728 Spills and Leaks

The standard procedures to be followed by Postal Service personnel for dealing with spills and leaks are specified in Management Instruction EL-810-2006-3, *Response to Hazardous Materials Releases*, and Handbook EL-812, *Hazardous Materials and Spill Response*.

73 Restricted Matter: Air Transportation

Restricted matter includes articles for which certain mailing restrictions have been imposed for reasons other than risk of harm to persons or property involved in moving the mail. Refer to Chapter [4](#) for mailing information on restricted matter.

731 Refusal by Air Carrier

Certain restricted articles, as described in 49 CFR 100-185 and the operator variations of the air carriers, may be accepted for air transportation if properly packaged. These articles must be labeled and bear a shipper's declaration in triplicate, as required by 49 CFR 172.204, or must be marked according to the air carrier's operator variations. Refer to the technical instruction of the International Civil Aviation Organization (ICAO) for air carrier operator variations.

Mailpieces refused by an air carrier that contain restricted matter, or are suspected to contain hazardous matter, must be handled in accordance with [711](#).

74 Perishable Matter: Air Transportation

741 General Requirements

Perishable matter is any item that can readily deteriorate during normal mail transport conditions and thereby lose value, create a health hazard, or cause a nuisance or disturbance.

742 Live Animals**742.1 Basic Conditions**

Most mailable live animals, except honeybees, are permitted to be sent via air transportation. However, the ability of the Postal Service to provide air transportation is dependent on the following:

- a. The animal must be mailable and eligible for transport via air.
- b. All provisions of airline tariffs and air carriers are met.
- c. Air carrier equipment is available to the Postal Service and allows the safe delivery of shipments within specified and reasonable time limits. Time allowance must also be provided for delays en route in air and ground transportation.

Note: Local Postal Service personnel are not authorized to refuse the deposit of mailable live animals that are properly packaged.

See [523](#).

742.2 Bees

Only queen honeybees are permitted to be sent in the domestic mail via air transportation (see [526.2](#) and [Exhibit 526.21](#)).

742.3 Refusal by Air Carrier

Mailpieces refused by an air carrier that contain live animals or other perishable matter, or are suspected to contain perishable matter, must be handled in accordance with [711](#).

743 Perishable Matter with Dry Ice

A mailpiece containing mailable matter that is packed in dry ice (carbon dioxide solid) to cool the perishable contents must meet all requirements in [349](#) that apply to sending dry ice in domestic mail via air transportation. For air transportation, the amount of dry ice cannot exceed 5 pounds per mailpiece. Dry ice is prohibited to be mailed to international or APO/FPO/DPO addresses.

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Appendix A

Hazardous Materials Table: Postal Service Mailability Guide

The mailing information in this table is based on the online DOT Hazardous Materials Table in 49 CFR 172.101 (dated December 30, 2013). The information is modified to identify the mailability of each hazardous material based on Postal Service mailing regulations. This table identifies the mailability of hazardous materials for *domestic mail only*. Almost no hazardous materials are permitted in international mail. For information on mailability in international mail, see Chapter [6](#) and [Exhibit 621.1](#).

In the domestic mail, generally only those hazardous materials meeting all of the following criteria are eligible for mailing:

- a. Designated by DOT as being eligible to be transported under its Limited Quantity Provision,
- b. Packaged and distributed in a quantity and form intended or suitable for retail sale, and
- c. Designed for consumption by individuals for their personal care or household uses (i.e. consumer commodity material) are eligible for mailing and subject to postal quantity limitations.

The only exceptions to the above criteria are for the small number of materials listed in [322](#).

The columns in the hazardous materials table lists the mailability according to Postal Service regulations. If the entry is “Prohibited,” the material is nonmailable. If the entry cites a reference to this publication, the material is subject to those requirements and restrictions. If the entry is “Limited Quantity,” the material is mailable only if it can qualify as a Limited Quantity air material or Limited Quantity surface material in the Postal Service. Limited Quantity air and Limited Quantity surface materials cannot exceed the postal quantity limits specified in this publication. The mailer is responsible for correctly determining if the hazardous material is eligible in the Postal Service networks. If assistance is needed, the mailer may request a ruling from the PCSC as provided in [215.2](#). If the hazardous material is mailable in the domestic mail, refer to Column (e) and (f), as appropriate, to determine the applicable postal packaging instruction in Appendix C.

The columns in the table contain the following information:

Column (a): Lists the proper shipping name of the hazardous material in roman type. Text that appears in *italic* type is not part of the proper shipping name of the hazardous material and is listed for descriptive or reference purposes. Some listings direct the user to the preferred proper shipping

name of a material listed elsewhere in the table. The text in this column closely matches the information in Column 2 of the Hazardous Materials Table in 49 CFR 172.101.

Column (b): Lists the assigned hazard class or division of the hazardous material. The entry “Forbidden” means the material may not be transported under any circumstances. The entry “n/a” means the material does not have an assigned hazard class. If the field is blank, refer to the listing for the preferred proper shipping name cited in Column (a). The text in this column closely matches the information in Column 3 of the Hazardous Materials Table in 49 CFR 172.101.

Column (c): Lists the identification (ID) number assigned to the hazardous material. The number may be either a United Nations (UN) number or a North American (NA) number. This field is blank if Column (a) directs the user to the listing for the preferred proper shipping name of the material, or if the entry in Column (b) is “Forbidden.” The text in this column closely matches the information in Column 4 of the Hazardous Materials Table in 49 CFR 172.101.

Column (d): Lists the DOT Packing Group (PG) assignment for the hazardous material. Not all hazard classes have DOT Packing Group assignments. If this field contains “n/a,” the material is in a hazard class that does not use Packing Group assignments. This field is blank if Column (a) directs the user to the listing for the preferred proper shipping name of the material, or if the entry in Column (b) is “Forbidden.” The text in this column closely matches the information in Column 5 of the Hazardous Materials Table in 49 CFR 172.101.

Column (e): Lists the USPS packaging instruction in Appendix [C](#) that must be followed if the hazardous material is permitted in domestic mail via air transportation. This field is blank if Column (a) directs the user to the listing for the preferred proper shipping name of the material, or if the hazardous material is prohibited from mailing as designated in Column (e). If the entry in this column is “Prohibited,” the material is not permitted in domestic mail via air transportation.

Column (f): Lists the USPS packaging instruction in Appendix [C](#) that must be followed if the hazardous material is permitted in domestic mail via surface transportation. This field is blank if Column (a) directs the user to the listing for the preferred proper shipping name of the material, or if the hazardous material is prohibited from mailing as designated in Column (e). If the entry in this column is “Prohibited,” the material is not permitted in domestic mail via surface transportation.

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|------------------|---------------|------------|-----------------------|---------------------------|
| A | | | | | |
| <i>Accellerene</i> , see p-Nitrosodimethylaniline | | | | | |
| <i>Accumulators, electric</i> , see Batteries, wet etc. | | | | | |
| Accumulators, pressurized, pneumatic or hydraulic (containing nonflammable gas), see Articles pressurized, pneumatic or hydraulic (containing nonflammable gas) | | | | | |
| Acetal | 3 | UN1088 | II | Prohibited | 3A |
| Acetaldehyde | 3 | UN1089 | I | Prohibited | Prohibited |
| Acetaldehyde ammonia | 9 | UN1841 | III | Prohibited | 9C |
| Acetaldehyde oxime | 3 | UN2332 | III | Prohibited | 3A |
| Acetic acid, glacial or Acetic acid solution, with more than 80 percent acid, by mass | 8 | UN2789 | II | 8A | 8A |
| Acetic acid solution, not less than 50 percent but not more than 80 percent acid, by mass | 8 | UN2790 | II | 8A | 8A |
| Acetic acid solution, with more than 10 percent and less than 50 percent acid, by mass | 8 | UN2790 | III | 8A | 8A |
| Acetic anhydride | 8 | UN1715 | II | 8A | 8A |
| Acetone | 3 | UN1090 | II | Prohibited | 3A |
| Acetone cyanohydrin, stabilized | 6.1 | UN1541 | I | Prohibited | Prohibited |
| Acetone oils | 3 | UN1091 | II | Prohibited | 3A |
| Acetonitrile | 3 | UN1648 | II | Prohibited | 3A |
| <i>Acetyl acetone peroxide with more than 9 percent by mass active oxygen</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Acetyl benzoyl peroxide, solid, or with more than 40 percent in solution</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Acetyl bromide | 8 | UN1716 | II | 8A | 8A |
| Acetyl chloride | 3 | UN1717 | II | Prohibited | Prohibited |
| <i>Acetyl cyclohexanesulfonyl peroxide, with more than 82 percent wetted with less than 12 percent water</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Acetyl iodide | 8 | UN1898 | II | 8A | 8A |
| Acetyl methyl carbinol | 3 | UN2621 | III | Prohibited | 3A |
| <i>Acetyl peroxide, solid, or with more than 25 percent in solution</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Acetylene, dissolved | 2.1 | UN1001 | n/a | Prohibited | Prohibited |
| <i>Acetylene (liquified)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Acetylene silver nitrate</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Acetylene, solvent free</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|-------------------------|----------------------|-------------------|------------------------------|----------------------------------|
| <i>Acetylene tetrabromide, see Tetrabromoethane</i> | | | | | |
| <i>Acid butyl phosphate, see Butyl acid phosphate</i> | | | | | |
| <i>Acid, sludge, see Sludge, acid</i> | | | | | |
| Acridine | 6.1 | UN2713 | III | 6A | 6A |
| Acrolein dimer, stabilized | 3 | UN2607 | III | Prohibited | 3A |
| Acrolein, stabilized | 6.1 | UN1092 | I | Prohibited | Prohibited |
| Acrylamide, solid | 6.1 | UN2074 | III | 6A | 6A |
| Acrylamide, solution | 6.1 | UN3426 | III | 6A | 6A |
| Acrylic acid, stabilized | 8 | UN2218 | II | 8A | 8A |
| Acrylonitrile, stabilized | 3 | UN1093 | I | Prohibited | Prohibited |
| <i>Actuating cartridge, explosive, see Cartridges, power device</i> | | | | | |
| <i>Adhesives, containing a flammable liquid</i> | 3 | UN1133 | I, II, III | Prohibited | 3A |
| Adiponitrile | 6.1 | UN2205 | III | 6A | 6A |
| <i>Aerosols, corrosive, Packing Group II or III, (each not exceeding 1 L capacity)</i> | 2.2 | UN1950 | n/a | 2B | 2B |
| <i>Aerosols, flammable (each not exceeding 1 L capacity)</i> | 2.1 | UN1950 | n/a | Prohibited | 2A |
| <i>Aerosols, flammable, n.o.s. (engine starting fluid) (each not exceeding 1 L capacity)</i> | 2.1 | UN1950 | n/a | Prohibited | 2A |
| <i>Aerosols, nonflammable (each not exceeding 1 L capacity)</i> | 2.2 | UN1950 | n/a | 2B | 2B |
| <i>Aerosols, poison, each not exceeding 1 L capacity</i> | 2.2 | UN1950 | n/a | 2B | 2B |
| Air bag inflators, or Air bag modules, or Seatbelt pretensioners | 1.4G | UN0503 | II | Prohibited | Prohibited |
| Air bag inflators, or Air bag modules, or Seatbelt pretensioners | 9 | UN3268 | III | Prohibited | Prohibited |
| Air, compressed | 2.2 | UN1002 | n/a | 2B | 2B |
| Air, refrigerated liquid (<i>cryogenic liquid</i>) | 2.2 | UN1003 | n/a | Prohibited | Prohibited |
| Air, refrigerated liquid (<i>cryogenic liquid</i>), nonpressurized | 2.2 | UN1003 | n/a | Prohibited | Prohibited |
| <i>Aircraft engines (including turbines), see Engines, internal combustion</i> | | | | | |
| <i>Aircraft evacuation slides, see Lifesaving appliances etc.</i> | | | | | |
| <i>Aircraft hydraulic power unit fuel tank (containing a mixture of anhydrous hydrazine and monomethyl hydrazine) (M86 fuel)</i> | 3 | UN3165 | I | Prohibited | Prohibited |
| <i>Aircraft survival kits, see Lifesaving appliances etc.</i> | | | | | |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Alcoholates solution, n.o.s., <i>in alcohol</i> | 3 | UN3274 | II | Prohibited | Prohibited |
| Alcoholic beverages | 3 | UN3065 | II, III | Prohibited | Prohibited |
| Alcohols, n.o.s. | 3 | UN1987 | I | Prohibited | Prohibited |
| Alcohols, n.o.s. | 3 | UN1987 | II, III | Prohibited | 3A |
| Alcohols, flammable, toxic, n.o.s. | 3 | UN1986 | I, II, III | Prohibited | Prohibited |
| Aldehydes, n.o.s. | 3 | UN1989 | I | Prohibited | Prohibited |
| Aldehydes, n.o.s. | 3 | UN1989 | II, III | Prohibited | 3A |
| Aldehydes, flammable, toxic, n.o.s. | 3 | UN1988 | I, II | Prohibited | Prohibited |
| Aldehydes, flammable, toxic, n.o.s. | 3 | UN1988 | III | Prohibited | 3A |
| Aldol | 6.1 | UN2839 | II | Prohibited | Prohibited |
| Aldrin, <i>liquid</i> | 6.1 | NA2762 | II | Prohibited | Prohibited |
| Aldrin, <i>solid</i> | 6.1 | NA2761 | II | Prohibited | Prohibited |
| Alkali metal alcoholates, selfheating, corrosive, n.o.s. | 4.2 | UN3206 | II, III | Prohibited | Prohibited |
| Alkali metal alloys, liquid, n.o.s. | 4.3 | UN1421 | I | Prohibited | Prohibited |
| Alkali metal amalgam, liquid | 4.3 | UN1389 | I | Prohibited | Prohibited |
| Alkali metal amalgam, solid | 4.3 | UN3401 | I | Prohibited | Prohibited |
| Alkali metal amides | 4.3 | UN1390 | II | Prohibited | 4A |
| Alkali metal dispersions, flammable or Alkaline earth metal dispersions, flammable | 4.3 | UN3482 | I | Prohibited | Prohibited |
| Alkali metal dispersions, or Alkaline earth metal dispersions | 4.3 | UN1391 | I | Prohibited | Prohibited |
| <i>Alkaline corrosive liquids, n.o.s., see Caustic alkali liquids, n.o.s.</i> | | | | | |
| Alkaline earth metal alcoholates, n.o.s. | 4.2 | UN3205 | II, III | Prohibited | Prohibited |
| Alkaline earth metal alloys, n.o.s. | 4.3 | UN1393 | II | Prohibited | 4A |
| Alkaline earth metal amalgams, liquid | 4.3 | UN1392 | I | Prohibited | Prohibited |
| Alkaline earth metal amalgams, solid | 4.3 | UN3402 | I | Prohibited | Prohibited |
| Alkaloids, liquid, n.o.s., or Alkaloid salts, liquid, n.o.s. | 6.1 | UN3140 | I, II | Prohibited | Prohibited |
| Alkaloids, liquid, n.o.s., or Alkaloid salts, liquid, n.o.s. | 6.1 | UN3140 | III | 6A | 6A |
| Alkaloids, solid, n.o.s. or Alkaloid salts, solid, n.o.s. <i>poisonous</i> | 6.1 | UN1544 | I, II | Prohibited | Prohibited |
| Alkaloids, solid, n.o.s. or Alkaloid salts, solid, n.o.s. <i>poisonous</i> | 6.1 | UN1544 | III | 6A | 6A |
| Alkyl sulfonic acids, liquid or Aryl sulfonic acids, liquid <i>with more than 5 percent free sulfuric acid</i> | 8 | UN2584 | II | 8A | 8A |
| Alkyl sulfonic acids, liquid or Aryl sulfonic acids, liquid <i>with not more than 5 percent free sulfuric acid</i> | 8 | UN2586 | III | 8A | 8A |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Alkyl sulfonic acids, solid or Aryl sulfonic acids, solid <i>with more than 5 percent free sulfuric acid</i> | 8 | UN2583 | II | 8A | 8A |
| Alkyl sulfonic acids, solid or Aryl sulfonic acids, solid <i>with not more than 5 percent free sulfuric acid</i> | 8 | UN2585 | III | 8A | 8A |
| Alkylphenols, liquid, n.o.s. (<i>including C2-C12 homologues</i>) | 8 | UN3145 | I | Prohibited | Prohibited |
| Alkylphenols, liquid, n.o.s. (<i>including C2-C12 homologues</i>) | 8 | UN3145 | II, III | 8A | 8A |
| Alkylphenols, solid, n.o.s. (<i>including C2-C12 homologues</i>) | 8 | UN2430 | I | Prohibited | Prohibited |
| Alkylphenols, solid, n.o.s. (<i>including C2-C12 homologues</i>) | 8 | UN2430 | II, III | 8A | 8A |
| Alkylsulfuric acids | 8 | UN2571 | II | 8A | 8A |
| <i>Allethrin</i> , see Pesticides, liquid, toxic, n.o.s. | | | | | |
| Allyl acetate | 3 | UN2333 | II | Prohibited | Prohibited |
| Allyl alcohol | 6.1 | UN1098 | I | Prohibited | Prohibited |
| Allyl bromide | 3 | UN1099 | I | Prohibited | Prohibited |
| Allyl chloride | 3 | UN1100 | I | Prohibited | Prohibited |
| <i>Allyl chlorocarbonate</i> , see Allyl chloroformate | | | | | |
| Allyl chloroformate | 6.1 | UN1722 | I | Prohibited | Prohibited |
| Allyl ethyl ether | 3 | UN2335 | II | Prohibited | Prohibited |
| Allyl formate | 3 | UN2336 | I | Prohibited | Prohibited |
| Allyl glycidyl ether | 3 | UN2219 | III | Prohibited | 3A |
| Allyl iodide | 3 | UN1723 | II | Prohibited | Prohibited |
| Allyl isothiocyanate, stabilized | 6.1 | UN1545 | II | Prohibited | Prohibited |
| Allylamine | 6.1 | UN2334 | I | Prohibited | Prohibited |
| Allyltrichlorosilane, stabilized | 8 | UN1724 | II | Prohibited | Prohibited |
| Aluminum borohydride or Aluminum borohydride in devices | 4.2 | UN2870 | I | Prohibited | Prohibited |
| Aluminum bromide, anhydrous | 8 | UN1725 | II | 8A | 8A |
| Aluminum bromide, solution | 8 | UN2580 | III | 8A | 8A |
| Aluminum carbide | 4.3 | UN1394 | II | Prohibited | 4A |
| Aluminum chloride, anhydrous | 8 | UN1726 | II | 8A | 8A |
| Aluminum chloride, solution | 8 | UN2581 | III | 8A | 8A |
| <i>Aluminum dross, wet or hot</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Aluminum ferrosilicon powder | 4.3 | UN1395 | II, III | Prohibited | 4A |
| Aluminum hydride | 4.3 | UN2463 | I | Prohibited | Prohibited |
| Aluminum, molten | 9 | NA9260 | III | Prohibited | Prohibited |
| Aluminum, nitrate | 5.1 | UN1438 | III | 5A | 5A |
| <i>Aluminum phosphate solution</i> , see Corrosive liquids, etc. | | | | | |
| Aluminum phosphide | 4.3 | UN1397 | I | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|------------------|---------------|------------|-----------------------|---------------------------|
| Aluminum phosphide pesticides | 6.1 | UN3048 | I | Prohibited | Prohibited |
| Aluminum powder, coated | 4.1 | UN1309 | II, III | Prohibited | 4A |
| Aluminum powder, uncoated | 4.3 | UN1396 | II, III | Prohibited | 4A |
| Aluminum resinate | 4.1 | UN2715 | III | Prohibited | 4A |
| Aluminum silicon powder, uncoated | 4.3 | UN1398 | III | Prohibited | 4A |
| Aluminum smelting by-products or Aluminum remelting by-products | 4.3 | UN3170 | II, III | Prohibited | Prohibited |
| <i>Amatols</i> , see Explosives, blasting, type B | | | | | |
| Amine, flammable, corrosive, n.o.s. or Polyamines, flammable, corrosive, n.o.s. | 3 | UN2733 | I, II | Prohibited | Prohibited |
| Amine, flammable, corrosive, n.o.s. or Polyamines, flammable, corrosive, n.o.s. | 3 | UN2733 | III | Prohibited | 3A |
| Amine, liquid, corrosive, flammable, n.o.s. or Polyamines, liquid, corrosive, flammable, n.o.s. | 8 | UN2734 | I, II | Prohibited | Prohibited |
| Amines, liquid, corrosive, n.o.s. or Polyamines, liquid, corrosive, n.o.s. | 8 | UN2735 | I | Prohibited | Prohibited |
| Amines, liquid, corrosive, n.o.s. or Polyamines, liquid, corrosive, n.o.s. | 8 | UN2735 | II, III | 8A | 8A |
| Amines, solid, corrosive, n.o.s. or Polyamines, solid, corrosive, n.o.s. | 8 | UN3259 | I | Prohibited | Prohibited |
| Amines, solid, corrosive, n.o.s. or Polyamines, solid, corrosive, n.o.s. | 8 | UN3259 | II, III | 8A | 8A |
| 2-Amino-4-chlorophenol | 6.1 | UN2673 | II | Prohibited | Prohibited |
| 2-Amino-5-diethylaminopentane | 6.1 | UN2946 | III | 6A | 6A |
| 2-Amino-4,6-Dinitrophenol, wetted with not less than 20 percent water by mass | 4.1 | UN3317 | I | Prohibited | Prohibited |
| 2-(2-Aminoethoxy) ethanol | 8 | UN3055 | III | 8A | 8A |
| N-Aminoethylpiperazine | 8 | UN2815 | III | 8A | 8A |
| Aminophenols (<i>o</i> -; <i>m</i> -; <i>p</i> -) | 6.1 | UN2512 | III | 6A | 6A |
| <i>Aminopropyl</i> diethanolamine, see Amines, etc. | | | | | |
| <i>n</i> -Aminopropylmorpholine, see Amines, etc. | | | | | |
| Aminopyridines (<i>o</i> -; <i>m</i> -; <i>p</i> -) | 6.1 | UN2671 | II | Prohibited | Prohibited |
| Ammonia, anhydrous (international) | 2.3 | UN1005 | n/a | Prohibited | Prohibited |
| Ammonia, anhydrous (domestic) | 2.2 | UN1005 | n/a | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|-------------------------|----------------------|-------------------|------------------------------|----------------------------------|
| Ammonia solution, <i>relative density between 0.880 and 0.957 at 15° C in water, with more than 10 percent but not more than 35 percent ammonia</i> | 8 | UN2672 | III | 8A | 8A |
| Ammonia solution, <i>relative density less than 0.880 at 15° C in water, with more than 35 percent but not more than 50 percent ammonia</i> | 2.2 | UN2073 | n/a | Prohibited | Prohibited |
| Ammonia solution, <i>relative density less than 0.880 at 15° C in water, with more than 50 percent ammonia</i> | 2.2 | UN3318 | n/a | Prohibited | Prohibited |
| Ammonia solution, <i>relative density less than 0.880 at 15° C in water, with more than 50 percent ammonia</i> | 2.3 | UN3318 | n/a | Prohibited | Prohibited |
| Ammonium arsenate | 6.1 | UN1546 | II | Prohibited | Prohibited |
| Ammonium azide | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Ammonium bifluoride, solid, see Ammonium hydrogen difluoride, solid | | | | | |
| Ammonium bifluoride, solution, see Ammonium hydrogen difluoride, solution | | | | | |
| Ammonium bromate | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Ammonium chlorate | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Ammonium dichromate | 5.1 | UN1439 | II | 5A | 5A |
| Ammonium dintro-o-cresolate, solid | 6.1 | UN1843 | II | Prohibited | Prohibited |
| Ammonium dintro-o-cresolate, solution | 6.1 | UN3424 | II | Prohibited | Prohibited |
| Ammonium fluoride | 6.1 | UN2505 | III | 6A | 6A |
| Ammonium fluorosilicate | 6.1 | UN2854 | III | 6A | 6A |
| Ammonium fulminate | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Ammonium hydrogen sulfate | 8 | UN2506 | II | 8A | 8A |
| Ammonium hydrogendifluoride, solid | 8 | UN1727 | II | 8A | 8A |
| Ammonium hydrogendifluoride, solution | 8 | UN2817 | II | Prohibited | Prohibited |
| Ammonium hydrogendifluoride, solution | 8 | UN2817 | III | 8A | 8A |
| Ammonium hydrosulfide, solution, see Ammonium sulfide solution | | | | | |
| Ammonium hydroxide, see Ammonia solutions, etc. | | | | | |
| Ammonium metavanadate | 6.1 | UN2859 | II | Prohibited | Prohibited |
| Ammonium nitrate fertilizers | 5.1 | NA2072 | III | 5A | 5A |
| Ammonium nitrate based fertilizers | 5.1 | UN2067 | III | 5A | 5A |
| Ammonium nitrate based fertilizers | 9 | UN2071 | III | 9C | 9C |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|-------------------------|----------------------|-------------------|------------------------------|----------------------------------|
| Ammonium nitrate-fuel oil mixture containing only prilled ammonium nitrate and fuel oil | 1.5D | NA0331 | II | Prohibited | Prohibited |
| Ammonium nitrate, liquid (<i>hot concentrated solution</i>) | 5.1 | UN2426 | n/a | Prohibited | Prohibited |
| Ammonium nitrate mixed fertilizers | 5.1 | NA2069 | III | 5A | 5A |
| Ammonium nitrate, with more than 0.2 percent combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance | 1.1D | UN0222 | II | Prohibited | Prohibited |
| Ammonium nitrate, with not more than 0.2 percent of combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance | 5.1 | UN1942 | III | 5A | 5A |
| Ammonium nitrate | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Ammonium perchlorate | 1.1D | UN0402 | II | Prohibited | Prohibited |
| Ammonium perchlorate | 5.1 | UN1442 | II | 5A | 5A |
| Ammonium permanganate | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Ammonium persulfate | 5.1 | UN1444 | III | 5A | 5A |
| Ammonium picrate, dry or wetted with less than 10 percent water, by mass | 1.1D | UN0004 | II | Prohibited | Prohibited |
| Ammonium picrate, wetted with not less than 10 percent water, by mass | 4.1 | UN1310 | I | Prohibited | Prohibited |
| Ammonium polysulfide, solution | 8 | UN2818 | II | Prohibited | Prohibited |
| Ammonium polysulfide, solution | 8 | UN2818 | III | 8A | 8A |
| Ammonium polyvanadate | 6.1 | UN2861 | II | 6A | 6A |
| Ammonium silicofluoride, see Ammonium fluorosilicate | | | | | |
| Ammonium sulfide solution | 8 | UN2683 | II | Prohibited | Prohibited |
| Ammunition, blank, see Cartridges for weapons, blank | | | | | |
| Ammunition, illuminating with or without burster, expelling charge, or propelling charge | 1.2G | UN0171 | II | Prohibited | Prohibited |
| Ammunition, illuminating with or without burster, expelling charge, or propelling charge | 1.3G | UN0254 | II | Prohibited | Prohibited |
| Ammunition, illuminating with or without burster, expelling charge, or propelling charge | 1.4G | UN0297 | II | Prohibited | Prohibited |
| Ammunition, incendiary liquid or gel, with burster, expelling charge, or propelling charge | 1.3J | UN0247 | II | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|-------------------------|----------------------|-------------------|------------------------------|----------------------------------|
| <i>Ammunition, incendiary (water-activated contrivances) with burster, expelling charge, or propelling charge, see Contrivances, water-activated, etc.</i> | | | | | |
| <i>Ammunition, incendiary, white phosphorus, with burster, expelling charge, or propelling charge</i> | 1.2H | UN0243 | II | Prohibited | Prohibited |
| <i>Ammunition, incendiary, white phosphorus, with burster, expelling charge, or propelling charge</i> | 1.3H | UN0244 | II | Prohibited | Prohibited |
| <i>Ammunition, incendiary with or without burster, expelling charge, or propelling charge</i> | 1.2G | UN0009 | II | Prohibited | Prohibited |
| <i>Ammunition, incendiary with or without burster, expelling charge, or propelling charge</i> | 1.3G | UN0010 | II | Prohibited | Prohibited |
| <i>Ammunition, incendiary with or without burster, expelling charge, or propelling charge</i> | 1.4G | UN0300 | II | Prohibited | Prohibited |
| <i>Ammunition, practice</i> | 1.4G | UN0362 | II | Prohibited | Prohibited |
| <i>Ammunition, practice</i> | 1.3G | UN0488 | II | Prohibited | Prohibited |
| <i>Ammunition, proof</i> | 1.4G | UN0363 | II | Prohibited | Prohibited |
| <i>Ammunition, rocket, see Warheads, rocket etc.</i> | | | | | |
| <i>Ammunition, SA (small arms), see Cartridges for weapons, etc.</i> | | | | | |
| <i>Ammunition, smoke (water-activated contrivances), white phosphorus, with burster, expelling charge, or propelling charge, see Contrivances, water-activated, etc. (UN0248)</i> | | | | | |
| <i>Ammunition, smoke (wateractivated contrivances), without white phosphorus or phosphides, with burster, expelling charge, or propelling charge, see Contrivances, wateractivated, etc. (UN0249)</i> | | | | | |
| <i>Ammunition smoke, white phosphorus with burster, expelling charge, or propelling charge</i> | 1.2H | UN0245 | II | Prohibited | Prohibited |
| <i>Ammunition, smoke, white phosphorus with burster, expelling charge, or propelling charge</i> | 1.3H | UN0246 | II | Prohibited | Prohibited |
| <i>Ammunition, smoke, with or without burster, expelling charge, or propelling charge</i> | 1.2G | UN0015 | II | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|-------------------------|----------------------|-------------------|------------------------------|----------------------------------|
| Ammunition, smoke, <i>with or without burster, expelling charge, or propelling charge</i> | 1.3G | UN0016 | II | Prohibited | Prohibited |
| Ammunition, smoke, <i>with or without burster, expelling charge, or propelling charge</i> | 1.4G | UN0303 | II | Prohibited | Prohibited |
| <i>Ammunition, sporting, see Cartridges for weapons, etc. (UN0012; UN0328; UN0339)</i> | | | | | |
| Ammunition, tearproducing, nonexplosive, <i>without burster or expelling charge, non-fuzed</i> | 6.1 | UN2017 | II | Prohibited | Prohibited |
| Ammunition, tearproducing <i>with burster, expelling charge, or propelling charge</i> | 1.2G | UN0018 | II | Prohibited | Prohibited |
| Ammunition, tearproducing <i>with burster, expelling charge, or propelling charge</i> | 1.3G | UN0019 | II | Prohibited | Prohibited |
| Ammunition, tearproducing <i>with burster, expelling charge, or propelling charge</i> | 1.4G | UN0301 | II | Prohibited | Prohibited |
| <i>Ammunition, toxic (wateractivated contrivances), with burster, expelling charge, or propelling charge, see Contrivances, wateractivated, etc.</i> | | | | | |
| Ammunition, toxic, nonexplosive, <i>without burster or expelling charge, nonfuzed</i> | 6.1 | UN2016 | II | Prohibited | Prohibited |
| Ammunition, toxic <i>with burster, expelling charge, or propelling charge</i> | 1.2K | UN0020 | II | Prohibited | Prohibited |
| Ammunition, toxic <i>with burster, expelling charge, or propelling charge</i> | 1.3K | UN0021 | II | Prohibited | Prohibited |
| Amyl acetates | 3 | UN1104 | III | Prohibited | 3A |
| Amyl acid phosphate | 8 | UN2819 | III | 8A | 8A |
| Amyl butyrates | 3 | UN2620 | III | Prohibited | 3A |
| Amyl chlorides | 3 | UN1107 | II | Prohibited | 3A |
| Amyl formates | 3 | UN1109 | III | Prohibited | 3A |
| Amyl mercaptans | 3 | UN1111 | II | Prohibited | Prohibited |
| n-Amyl methyl ketone | 3 | UN1110 | III | Prohibited | 3A |
| Amyl nitrate | 3 | UN1112 | III | Prohibited | 3A |
| Amyl nitrites | 3 | UN1113 | II | Prohibited | 3A |
| Amylamines | 3 | UN1106 | II | Prohibited | Prohibited |
| Amylamines | 3 | UN1106 | III | Prohibited | 3A |
| Amyltrichlorosilane | 8 | UN1728 | II | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|-------------------------|----------------------|-------------------|------------------------------|----------------------------------|
| <i>Anhydrous ammonia</i> see Ammonia, anhydrous, liquified | | | | | |
| <i>Anhydrous hydrofluoric acid</i> , see Hydrogen fluoride, anhydrous | | | | | |
| Aniline | 6.1 | UN1547 | II | Prohibited | Prohibited |
| Aniline hydrochloride | 6.1 | UN1548 | III | 6A | 6A |
| Aniline oil, see Aniline | | | | | |
| Anisidines | 6.1 | UN2431 | III | 6A | 6A |
| Anisole | 3 | UN2222 | III | Prohibited | 3A |
| Anisoyl chloride | 8 | UN1729 | II | 8A | 8A |
| <i>Antifreeze, liquid</i> , see Flammable liquids, n.o.s | | | | | |
| <i>Antimonous chloride</i> , see Antimony trichloride | | | | | |
| Antimony compounds, inorganic, liquid, n.o.s. | 6.1 | UN3141 | III | 6A | 6A |
| Antimony compounds, inorganic, solid, n.o.s. | 6.1 | UN1549 | III | 6A | 6A |
| Antimony lactate | 6.1 | UN1550 | III | 6A | 6A |
| Antimony pentachloride, liquid | 8 | UN1730 | II | Prohibited | Prohibited |
| Antimony pentachloride, solutions | 8 | UN1731 | II, III | 8A | 8A |
| Antimony pentafluoride | 8 | UN1732 | II | Prohibited | Prohibited |
| Antimony potassium tartrate | 6.1 | UN1551 | III | 6A | 6A |
| Antimony powder | 6.1 | UN2871 | III | 6A | 6A |
| <i>Antimony sulfide and a chlorate, mixtures of</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Antimony sulfide, solid</i> , see <i>Antimony compounds, inorganic, n.o.s.</i> | | | | | |
| Antimony tribromide, solid | 8 | NA1549 | II | 8A | 8A |
| Antimony tribromide, solution | 8 | NA1549 | II | 8A | 8A |
| Antimony trichloride, liquid | 8 | UN1733 | II | 8A | 8A |
| Antimony trichloride, solid | 8 | UN1733 | II | 8A | 8A |
| Antimony, trifluoride, solid | 8 | NA1549 | II | 8A | 8A |
| Antimony, trifluoride, solution | 8 | NA1549 | II | 8A | 8A |
| Aqua ammonia, see Ammonia solution, etc. | | | | | |
| Argon, compressed | 2.2 | UN1006 | n/a | 2B | 2B |
| Argon, refrigerated liquid (cryogenic liquid) | 2.2 | UN1951 | n/a | Prohibited | Prohibited |
| Arsenic | 6.1 | UN1558 | II | Prohibited | Prohibited |
| Arsenic acid, liquid | 6.1 | UN1553 | I | Prohibited | Prohibited |
| Arsenic acid, solid | 6.1 | UN1554 | II | Prohibited | Prohibited |
| Arsenic bromide | 6.1 | UN1555 | II | Prohibited | Prohibited |
| <i>Arsenic chloride</i> , see Arsenic trichloride | | | | | |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Arsenic compounds, liquid, n.o.s. <i>inorganic, including arsenates, n.o.s.; arsenites, n.o.s.; arsenic sulfides, n.o.s.; and organic compounds of arsenic, n.o.s.</i> | 6.1 | UN1556 | I, II | Prohibited | Prohibited |
| Arsenic compounds, liquid, n.o.s. <i>inorganic, including arsenates, n.o.s.; arsenites, n.o.s.; arsenic sulfides, n.o.s.; and organic compounds of arsenic, n.o.s.</i> | 6.1 | UN1556 | III | 6A | 6A |
| Arsenic compounds, solid, n.o.s. <i>inorganic, including arsenates, n.o.s.; arsenites, n.o.s.; arsenic sulfides, n.o.s.; and organic compounds of arsenic, n.o.s.</i> | 6.1 | UN1557 | I, II | Prohibited | Prohibited |
| Arsenic compounds, solid, n.o.s. <i>inorganic, including arsenates, n.o.s.; arsenites, n.o.s.; arsenic sulfides, n.o.s.; and organic compounds of arsenic, n.o.s.</i> | 6.1 | UN1557 | III | 6A | 6A |
| Arsenic pentoxide | 6.1 | UN1559 | II | Prohibited | Prohibited |
| Arsenic sulfide | 6.1 | NA1557 | II | Prohibited | Prohibited |
| <i>Arsenic sulfide and a chlorate, mixtures of</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Arsenic trichloride | 6.1 | UN1560 | I | Prohibited | Prohibited |
| Arsenic trioxide | 6.1 | UN1561 | II | Prohibited | Prohibited |
| Arsenic trisulfide | 6.1 | NA1557 | II | Prohibited | Prohibited |
| <i>Arsenic, white, solid, see Arsenic trioxide</i> | | | | | |
| Arsenical dust | 6.1 | UN1562 | II | Prohibited | Prohibited |
| Arsenical pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i> | 3 | UN2760 | I, II | Prohibited | Prohibited |
| Arsenical pesticides, liquid, toxic | 6.1 | UN2994 | I, II | Prohibited | Prohibited |
| Arsenical pesticides, liquid, toxic | 6.1 | UN2994 | III | 6A | 6A |
| Arsenical pesticides, liquid, toxic, <i>flammable flashpoint not less than 23° C</i> | 6.1 | UN2993 | I, II | Prohibited | Prohibited |
| Arsenical pesticides, liquid, toxic, <i>flammable flashpoint not less than 23° C</i> | 6.1 | UN2993 | III | 6A | 6A |
| Arsenical pesticides, solid, toxic | 6.1 | UN2759 | I, II | Prohibited | Prohibited |
| Arsenical pesticides, solid, toxic | 6.1 | UN2759 | III | 6A | 6A |
| <i>Arsenious acid, solid, see Arsenic trioxide</i> | | | | | |
| <i>Arsenious and mercuric iodide solution, see Arsenic compounds, liquid, n.o.s.</i> | | | | | |
| Arsine | 2.3 | UN2188 | n/a | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|-------------------------|----------------------|-------------------|------------------------------|----------------------------------|
| Articles, explosive, extremely insensitive <i>or</i> Articles, EEI | 1.6N | UN0486 | II | Prohibited | Prohibited |
| Articles, explosive, n.o.s. | 1.4S | UN0349 | II | Prohibited | Prohibited |
| Articles, explosive, n.o.s. | 1.4B | UN0350 | II | Prohibited | Prohibited |
| Articles, explosive, n.o.s. | 1.4C | UN0351 | II | Prohibited | Prohibited |
| Articles, explosive, n.o.s. | 1.4D | UN0352 | II | Prohibited | Prohibited |
| Articles, explosive, n.o.s. | 1.4G | UN0353 | II | Prohibited | Prohibited |
| Articles, explosive, n.o.s. | 1.1L | UN0354 | II | Prohibited | Prohibited |
| Articles, explosive, n.o.s. | 1.2L | UN0355 | II | Prohibited | Prohibited |
| Articles, explosive, n.o.s. | 1.3L | UN0356 | II | Prohibited | Prohibited |
| Articles, explosive, n.o.s. | 1.1C | UN0462 | II | Prohibited | Prohibited |
| Articles, explosive, n.o.s. | 1.1D | UN0463 | II | Prohibited | Prohibited |
| Articles, explosive, n.o.s. | 1.1E | UN0464 | II | Prohibited | Prohibited |
| Articles, explosive, n.o.s. | 1.1F | UN0465 | II | Prohibited | Prohibited |
| Articles, explosive, n.o.s. | 1.2C | UN0466 | II | Prohibited | Prohibited |
| Articles, explosive, n.o.s. | 1.2D | UN0467 | II | Prohibited | Prohibited |
| Articles, explosive, n.o.s. | 1.2E | UN0468 | II | Prohibited | Prohibited |
| Articles, explosive, n.o.s. | 1.2F | UN0469 | II | Prohibited | Prohibited |
| Articles, explosive, n.o.s. | 1.3C | UN0470 | II | Prohibited | Prohibited |
| Articles, explosive, n.o.s. | 1.4E | UN0471 | II | Prohibited | Prohibited |
| Articles, explosive, n.o.s. | 1.4F | UN0472 | II | Prohibited | Prohibited |
| Articles, pressurized pneumatic <i>or</i> Hydraulic containing nonflammable gas | 2.2 | UN3164 | n/a | 2B | 2B |
| Articles, pyrophoric | 1.2L | UN0380 | II | Prohibited | Prohibited |
| Articles, pyrotechnic <i>for technical purposes</i> | 1.1G | UN0428 | II | Prohibited | Prohibited |
| Articles, pyrotechnic <i>for technical purposes</i> | 1.2G | UN0429 | II | Prohibited | Prohibited |
| Articles, pyrotechnic <i>for technical purposes</i> | 1.3G | UN0430 | II | Prohibited | Prohibited |
| Articles, pyrotechnic <i>for technical purposes</i> | 1.4G | UN0431 | II | Prohibited | Prohibited |
| Articles, pyrotechnic <i>for technical purposes</i> | 1.4S | UN0432 | II | Prohibited | Prohibited |
| Asbestos | 9 | NA2212 | III | Prohibited | 9C |
| <i>Ascaridole (organic peroxide)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Asphalt, <i>at or above its flashpoint</i> | 3 | NA1999 | III | Prohibited | 3A |
| <i>Asphalt</i> , cut back, see Tars, liquid, etc. | | | | | |
| <i>Automobile, motorcycle, tractor, other self-propelled vehicle, engine, or other mechanical apparatus, see Vehicle or Battery etc.</i> | | | | | |
| Aviation regulated liquid, n.o.s. | 9 | UN3334 | n/a | 9C | 9C |
| Aviation regulated solid, n.o.s. | 9 | UN3335 | n/a | 9C | 9C |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|------------------|---------------|------------|-----------------------|---------------------------|
| <i>Azaurolic, acid (salt of), (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Azido guanidine picrate (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>5-Azido-1-hydroxy tetrazole</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Azido hydroxy tetrazole (mercury and silver salts)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>3-Azido-1,2-Propylene glycol dinitrate</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Azidodithiocarbonic acid</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Azidoethyl nitrate</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| 1-Aziridinylphosphine oxide-(tris), see Tris-(1aziridinyl)phosphine oxide, solution | | | | | |
| Azodicarbonamide | 4.1 | UN3242 | II | Prohibited | 4A |
| <i>Azotetrazole (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| B | | | | | |
| Barium | 4.3 | UN1400 | II | Prohibited | 4A |
| Barium alloys, pyrophoric | 4.2 | UN1854 | I | Prohibited | Prohibited |
| Barium azide, <i>dry or wetted with less than 50 percent water, by mass</i> | 1.1A | UN0224 | II | Prohibited | Prohibited |
| Barium azide, <i>wetted with not less than 50 percent water, by mass</i> | 4.1 | UN1571 | I | Prohibited | Prohibited |
| Barium bromate | 5.1 | UN2719 | II | Prohibited | Prohibited |
| Barium chlorate, solid | 5.1 | UN1445 | II | Prohibited | Prohibited |
| Barium chlorate, solution | 5.1 | UN3405 | II | Prohibited | Prohibited |
| Barium compounds, n.o.s. | 6.1 | UN1564 | II | Prohibited | Prohibited |
| Barium compounds, n.o.s. | 6.1 | UN1564 | III | 6A | 6A |
| Barium cyanide | 6.1 | UN1565 | I | Prohibited | Prohibited |
| Barium hypochlorite <i>with more than 22 percent available chlorine</i> | 5.1 | UN2741 | II | 5A | 5A |
| Barium nitrate | 5.1 | UN1446 | II | Prohibited | Prohibited |
| Barium oxide | 6.1 | UN1884 | III | 6A | 6A |
| Barium perchlorate, solid | 5.1 | UN1447 | II | Prohibited | Prohibited |
| Barium perchlorate, solution | 5.1 | UN3406 | II, III | Prohibited | Prohibited |
| Barium permanganate | 5.1 | UN1448 | II | Prohibited | Prohibited |
| Barium peroxide | 5.1 | UN1449 | II | Prohibited | Prohibited |
| <i>Barium selenate, see Selenates or Selenites</i> | | | | | |
| <i>Barium selenite, see Selenates or Selenites</i> | | | | | |
| Barium styphnate | 1.1A | NA0473 | II | Prohibited | Prohibited |
| Batteries, containing sodium | 4.3 | UN3292 | II | Prohibited | Prohibited |
| Batteries, dry, containing potassium hydroxide solid, <i>electric, storage</i> | 8 | UN3028 | III | Prohibited | Prohibited |
| Batteries, dry, <i>not subject to the requirements of 49 CFR</i> | n/a | n/a | n/a | Mailable per 348.22b | Mailable per 348.22b |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Batteries, nickel-metal hydride see Batteries, dry. Sealed, n.o.s. for <i>nickel metal hydride batteries transported by modes other than vessel</i> | 9 | UN3496 | n/a | Prohibited | Mailable per 348.22b |
| Batteries, wet, filled with acid, <i>electric storage</i> | 8 | UN2794 | III | Prohibited | Prohibited |
| Batteries, wet, filled with alkali, <i>electric storage</i> | 8 | UN2795 | III | Prohibited | Prohibited |
| Batteries, wet, nonspillable, <i>electric storage</i> | 8 | UN2800 | III | 8B | 8B |
| Battery fluid, acid | 8 | UN2796 | II | 8A | 8A |
| Battery fluid, alkali | 8 | UN2797 | II | 8A | 8A |
| <i>Battery lithium type</i> , see Lithium batteries etc. | | | | | |
| Battery-powered vehicle or Battery-powered equipment | 9 | UN3171 | n/a | Prohibited | Prohibited |
| <i>Battery, wet, filled with acid or alkali with vehicle or mechanical equipment containing internal combustion engine</i>) see Vehicle, etc. or, Engines, internal combustion etc. | | | | | |
| Benzaldehyde | 9 | UN1990 | III | 9C | 9C |
| Benzene | 3 | UN1114 | II | Prohibited | 3A |
| <i>Benzene diazonium chloride (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Benzene diazonium nitrate (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Benzene phosphorus dichloride</i> , see Phenyl phosphorus dichloride | | | | | |
| <i>Benzene phosphorus thiodichloride</i> , see Phenyl phosphorus thiodichloride | | | | | |
| Benzene sulfonyl chloride | 8 | UN2225 | III | 8A | 8A |
| <i>Benzene triozone</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Benzenethiol, see Phenyl mercaptan | | | | | |
| Benzidine | 6.1 | UN1885 | II | Prohibited | Prohibited |
| <i>Benzol</i> , see Benzene | | | | | |
| Benzonitrile | 6.1 | UN2224 | II | Prohibited | Prohibited |
| Benzoquinone | 6.1 | UN2587 | II | Prohibited | Prohibited |
| Benzotrichloride | 8 | UN2226 | II | 8A | 8A |
| Benzotrifluoride | 3 | UN2338 | II | Prohibited | 3A |
| <i>Benzoxiadiazoles (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Benzoyl azide</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Benzoyl chloride | 8 | UN1736 | II | 8A | 8A |
| Benzyl bromide | 6.1 | UN1737 | II | Prohibited | Prohibited |
| Benzyl chloride | 6.1 | UN1738 | II | Prohibited | Prohibited |
| Benzyl chloride <i>unstabilized</i> | 6.1 | UN1738 | II | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Benzyl chloroformate | 8 | UN1739 | I | Prohibited | Prohibited |
| Benzyl iodide | 6.1 | UN2653 | II | Prohibited | Prohibited |
| Benzyl dimethylamine | 8 | UN2619 | II | 8A | 8A |
| Benzylidene chloride | 6.1 | UN1886 | II | Prohibited | Prohibited |
| Beryllium compounds, n.o.s. | 6.1 | UN1566 | II | Prohibited | Prohibited |
| Beryllium compounds, n.o.s. | 6.1 | UN1566 | III | 6A | 6A |
| Beryllium nitrate | 5.1 | UN2464 | II | Prohibited | Prohibited |
| Beryllium, powder | 6.1 | UN1567 | II | Prohibited | Prohibited |
| Bicyclo [2,2,1] hepta-2, 5-diene, stabilized or 2,5-Norbornadiene, stabilized | 3 | UN2251 | II | Prohibited | 3A |
| Biological substance, Category B | 6.2 | UN3373 | n/a | 6C | 6C |
| <i>Biphenyl triozoneide</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Bipyridilium pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i> | 3 | UN2782 | I, II | Prohibited | Prohibited |
| Bipyridilium pesticides, liquid, toxic | 6.1 | UN3016 | I, II | Prohibited | Prohibited |
| Bipyridilium pesticides, liquid, toxic | 6.1 | UN3016 | III | 6A | 6A |
| Bipyridilium pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i> | 6.1 | UN3015 | I, II | Prohibited | Prohibited |
| Bipyridilium pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i> | 6.1 | UN3015 | III | 6A | 6A |
| Bipyridilium pesticides, solid, toxic | 6.1 | UN2781 | I, II | Prohibited | Prohibited |
| Bipyridilium pesticides, solid, toxic | 6.1 | UN2781 | III | 6A | 6A |
| <i>Bis (Aminopropyl) piperazine</i> , see Corrosive liquids, n.o.s. | | | | | |
| Bisulfate, aqueous solution | 8 | UN2837 | II, III | 8A | 8A |
| Bisulfites, aqueous solutions, n.o.s. | 8 | UN2693 | III | 8A | 8A |
| Black powder, compressed or Gunpowder, compressed or Black powder, in pellets or Gunpowder, in pellets | 1.1D | UN0028 | II | Prohibited | Prohibited |
| Black powder for small arms | 4.1 | NA0027 | I | Prohibited | Prohibited |
| Black powder or Gunpowder, granular or as a meal | 1.1D | UN0027 | II | Prohibited | Prohibited |
| <i>Blasting agent</i> , n.o.s., see Explosives, blasting etc. | | | | | |
| <i>Blasting cap assemblies</i> , see Detonator assemblies, non-electric, for blasting | | | | | |
| <i>Blasting caps, electric</i> , see Detonators, electric, for blasting | | | | | |
| <i>Blasting caps, non-electric</i> , see Detonators, non-electric for blasting | | | | | |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|------------------|---------------|------------|-----------------------|---------------------------|
| <i>Bleaching powder, see Calcium hypochlorite mixtures, etc.</i> | | | | | |
| Blue asbestos (<i>Crocidolite</i>) or Brown asbestos (<i>amosite, mysorite</i>) | 9 | UN2212 | II | Prohibited | 9C |
| Bombs, photo-flash | 1.1F | UN0037 | II | Prohibited | Prohibited |
| Bombs, photo-flash | 1.1D | UN0038 | II | Prohibited | Prohibited |
| Bombs, photo-flash | 1.2G | UN0039 | II | Prohibited | Prohibited |
| Bombs, photo-flash | 1.3G | UN0299 | II | Prohibited | Prohibited |
| Bombs, smoke, non-explosive, with corrosive liquid, without initiating device | 8 | UN2028 | II | Prohibited | Prohibited |
| Bombs, with bursting charge | 1.1F | UN0033 | II | Prohibited | Prohibited |
| Bombs, with bursting charge | 1.1D | UN0034 | II | Prohibited | Prohibited |
| Bombs, with bursting charge | 1.2D | UN0035 | II | Prohibited | Prohibited |
| Bombs, with bursting charge | 1.2F | UN0291 | II | Prohibited | Prohibited |
| Bombs with flammable liquid, with bursting charge | 1.1J | UN0399 | II | Prohibited | Prohibited |
| Bombs with flammable liquid, with bursting charge | 1.2J | UN0400 | II | Prohibited | Prohibited |
| Boosters with detonator | 1.1B | UN0225 | II | Prohibited | Prohibited |
| Boosters with detonator | 1.2B | UN0268 | II | Prohibited | Prohibited |
| Boosters, without detonator | 1.1D | UN0042 | II | Prohibited | Prohibited |
| Boosters, without detonator | 1.2D | UN0283 | II | Prohibited | Prohibited |
| <i>Borate and chlorate mixtures, see Chlorate and borate mixtures</i> | | | | | |
| Borneol | 4.1 | UN1312 | III | Prohibited | Prohibited |
| Boron tribromide | 8 | UN2692 | I | Prohibited | Prohibited |
| Boron trichloride | 2.3 | UN1741 | n/a | Prohibited | Prohibited |
| Boron trifluoride acetic acid complex, liquid | 8 | UN1742 | II | 8A | 8A |
| Boron trifluoride acetic acid complex, solid | 8 | UN3419 | II | 8A | 8A |
| Boron trifluoride | 2.3 | UN1008 | n/a | Prohibited | Prohibited |
| Boron trifluoride diethyl etherate | 8 | UN2604 | I | Prohibited | Prohibited |
| Boron trifluoride dihydrate | 8 | UN2851 | II | 8A | 8A |
| Boron trifluoride dimethyl etherate | 4.3 | UN2965 | I | Prohibited | Prohibited |
| Boron trifluoride propionic acid complex, liquid | 8 | UN1743 | II | 8A | 8A |
| Boron trifluoride propionic acid complex, solid | 8 | UN3420 | II | 8A | 8A |
| <i>Box toe gum, see Nitrocellulose etc.</i> | | | | | |
| Bromates, inorganic, aqueous solution, n.o.s. | 5.1 | UN3213 | II | 5A | 5A |
| Bromates, inorganic, n.o.s. | 5.1 | UN1450 | II | 5A | 5A |
| Bromine or Bromine solutions | 8 | UN1744 | I | Prohibited | Prohibited |
| <i>Bromine azide</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Bromine chloride | 2.3 | UN2901 | Prohibited | Prohibited | Prohibited |
| Bromine pentafluoride | 5.1 | UN1745 | I | Prohibited | Prohibited |
| Bromine trifluoride | 5.1 | UN1746 | I | Prohibited | Prohibited |
| 4-Bromo-1,2-dinitrobenzene | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| 4-Bromo-1,2-dinitrobenzene (unstable at 59° C) | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| 1-Bromo-3-chloropropane | 6.1 | UN2688 | III | 6A | 6A |
| 1-Bromo-3-methylbutane | 3 | UN2341 | III | Prohibited | 3A |
| 1-Bromo-3-nitrobenzene (unstable at 56° C) | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Bromoacetic acid, <i>solid</i> | 8 | UN3425 | II | 8A | 8A |
| Bromoacetic acid, <i>solution</i> | 8 | UN1938 | II | 8A | 8A |
| Bromoacetone | 6.1 | UN1569 | II | Prohibited | Prohibited |
| Bromoacetyl bromide | 8 | UN2513 | II | 8A | 8A |
| Bromobenzene | 3 | UN2514 | III | Prohibited | 3A |
| Bromobenzyl cyanides, <i>liquid</i> | 6.1 | UN1694 | I | Prohibited | Prohibited |
| Bromobenzyl cyanides, <i>solid</i> | 6.1 | UN3449 | I | Prohibited | Prohibited |
| 1-Bromobutane | 3 | UN1126 | II | Prohibited | 3A |
| 2-Bromobutane | 3 | UN2339 | II | Prohibited | 3A |
| Bromochloromethane | 6.1 | UN1887 | III | 6A | 6A |
| 2-Bromoethyl ethyl ether | 3 | UN2340 | II | Prohibited | 3A |
| Bromoform | 6.1 | UN2515 | III | 6A | 6A |
| Bromomethylpropanes | 3 | UN2342 | II | Prohibited | 3A |
| 2-Bromo-2-nitropropane-1,3-diol | 4.1 | UN3241 | III | Prohibited | 4A |
| 2-Bromopentane | 3 | UN2343 | II | Prohibited | 3A |
| Bromopropanes | 3 | UN2344 | II, III | Prohibited | 3A |
| 3-Bromopropyne | 3 | UN2345 | II | Prohibited | 3A |
| Bromosilane | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Bromotoluene <i>alpha</i> , see Benzyl bromide | | | | | |
| Bromotrifluoroethylene | 2.1 | UN2419 | n/a | Prohibited | Prohibited |
| Bromotrifluoromethane or Refrigerant gas, R 13B1 | 2.2 | UN1009 | n/a | 2B | 2B |
| Brucine | 6.1 | UN1570 | I | Prohibited | Prohibited |
| Bursters, <i>explosive</i> | 1.1D | UN0043 | II | Prohibited | Prohibited |
| Butadienes, stabilized or Butadienes and Hydrocarbon mixture, stabilized containing more than 40 percent butadienes | 2.1 | UN1010 | n/a | Prohibited | 2A |
| Butane see also Petroleum gases, liquified | 2.1 | UN1011 | n/a | Prohibited | 2A |
| Butane, butane mixtures and mixtures having similar properties in cartridges each not exceeding 500 grams, see Receptacles, etc. | | | | | |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Butanedione | 3 | UN2346 | II | Prohibited | 3A |
| <i>1,2,4-Butanetriol trinitrate</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Butanols | 3 | UN1120 | II, III | Prohibited | 3A |
| <i>Tert-Butoxycarbonyl azide</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Butyl acetates | 3 | UN1123 | II, III | Prohibited | 3A |
| Butyl acid phosphate | 8 | UN1718 | III | 8A | 8A |
| Butyl acrylates, stabilized | 3 | UN2348 | III | Prohibited | 3A |
| <i>Butyl alcohols, see Butanols</i> | | | | | |
| Butyl benzenes | 3 | UN2709 | III | Prohibited | 3A |
| <i>n-Butyl bromide, see 1-Bromobutane</i> | | | | | |
| <i>n-Butyl chloride, see Chlorobutanes</i> | | | | | |
| n-Butyl chloroformate | 6.1 | UN2743 | I | Prohibited | Prohibited |
| secButyl chloroformate | 6.1 | NA2742 | I | Prohibited | Prohibited |
| <i>Butyl ethers, see Dibutyl ethers</i> | | | | | |
| <i>Butyl ethyl ether, see Ethyl butyl ether</i> | | | | | |
| n-Butyl formate | 3 | UN1128 | II | Prohibited | 3A |
| <i>Tert-Butyl hydroperoxide, with more than 90 percent with water</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Tert-Butyl hypochlorite | 4.2 | UN3255 | I | Prohibited | Prohibited |
| N-n-Butyl imidazole | 6.1 | UN2690 | II | Prohibited | Prohibited |
| Tert-Butyl isocyanate | 6.1 | UN2484 | I | Prohibited | Prohibited |
| n-Butyl isocyanate | 6.1 | UN2485 | I | Prohibited | Prohibited |
| Butyl mercaptans | 3 | UN2347 | II | Prohibited | 3A |
| n-Butyl methacrylate, stabilized | 3 | UN2227 | III | Prohibited | 3A |
| Butyl methyl ether | 3 | UN2350 | II | Prohibited | 3A |
| Butyl nitrites | 3 | UN2351 | I, II, III | Prohibited | 3A |
| <i>tert-Butyl peroxyacetate, with more than 76 percent in solution</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>n-Butyl peroxydicarbonate, with more than 52 percent in solution</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>tert-Butyl peroxyisobutyrate, with more than 77 percent in solution</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Butyl phosphoric acid, see Butyl acid phosphate</i> | | | | | |
| Butyl propionates | 3 | UN1914 | III | Prohibited | 3A |
| 5-tert-Butyl-2,4,6-trinitro-m-xylene or Musk xylene | 4.1 | UN2956 | III | Prohibited | Prohibited |
| Butyl vinyl ether, stabilized | 3 | UN2352 | II | Prohibited | 3A |
| n-Butylamine | 3 | UN1125 | II | Prohibited | Prohibited |
| N-Butylaniline | 6.1 | UN2378 | II | Prohibited | Prohibited |
| tert-Butylcyclohexylchloroformate | 6.1 | UN2747 | III | 6A | 6A |
| Butylene see also Petroleum gases, liquified | 2.1 | UN1012 | n/a | Prohibited | Prohibited |
| 1,2-Butylene oxide, stabilized | 3 | UN3022 | II | Prohibited | 3A |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|------------------|---------------|------------|-----------------------|---------------------------|
| Butyltoluenes | 6.1 | UN2667 | III | 6A | 6A |
| Butyltrichlorosilane | 8 | UN1747 | II | Prohibited | Prohibited |
| 1,4-Butynediol | 6.1 | UN2716 | III | Prohibited | Prohibited |
| Butyraldehyde | 3 | UN1129 | II | Prohibited | 3A |
| Butyraldoxime | 3 | UN2840 | III | Prohibited | 3A |
| Butyric acid | 8 | UN2820 | III | 8A | 8A |
| Butyric anhydride | 8 | UN2739 | III | 8A | 8A |
| Butyronitrile | 3 | UN2411 | II | Prohibited | Prohibited |
| Butyryl chloride | 3 | UN2353 | II | Prohibited | Prohibited |
| C | | | | | |
| Cacodylic acid | 6.1 | UN1572 | II | Prohibited | Prohibited |
| Cadmium compounds | 6.1 | UN2570 | I, II | Prohibited | Prohibited |
| Cadmium compounds | 6.1 | UN2570 | III | 6A | 6A |
| Caesium hydroxide | 8 | UN2682 | II | 8A | 8A |
| Caesium hydroxide solution | 8 | UN2681 | II, III | 8A | 8A |
| Calcium | 4.3 | UN1401 | II | Prohibited | 4A |
| Calcium arsenate | 6.1 | UN1573 | II | Prohibited | Prohibited |
| Calcium arsenate and calcium arsenite, mixtures, solid | 6.1 | UN1574 | II | Prohibited | Prohibited |
| Calcium arsenite, solid | 6.1 | NA1574 | II | Prohibited | Prohibited |
| <i>Calcium bisulfite solution, see Bisulfites, aqueous solutions, n.o.s.</i> | | | | | |
| Calcium carbide | 4.3 | UN1402 | I | Prohibited | Prohibited |
| Calcium carbide | 4.3 | UN1402 | II | Prohibited | 4A |
| Calcium chlorate | 5.1 | UN1452 | II | 5A | 5A |
| Calcium chlorate aqueous solution | 5.1 | UN2429 | II, III | 5A | 5A |
| Calcium chlorite | 5.1 | UN1453 | II | 5A | 5A |
| Calcium cyanamide <i>with more than 0.1 percent of calcium carbide</i> | 4.3 | UN1403 | III | Prohibited | 4A |
| Calcium cyanide | 6.1 | UN1575 | I | Prohibited | Prohibited |
| Calcium dithionite or Calcium hydrosulfite | 4.2 | UN1923 | II | Prohibited | Prohibited |
| Calcium hydride | 4.3 | UN1404 | I | Prohibited | Prohibited |
| Calcium hydrosulfite, see Calcium dithionite | | | | | |
| Calcium hypochlorite, dry, corrosive or Calcium hypochlorite mixtures, dry, corrosive with more than 39 percent available chlorine (8.8 percent available oxygen) | 5.1 | UN3485 | II | 5A | 5A |
| Calcium hypochlorite, dry or Calcium hypochlorite mixtures dry <i>with more than 39 percent available chlorine (8.8 percent available oxygen)</i> | 5.1 | UN1748 | II | 5A | 5A |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Calcium hypochlorite, hydrated, corrosive or Calcium hypochlorite, hydrated mixture, corrosive with not less than 5.5 percent but not more than 16 percent water | 5.1 | UN3487 | II | 5A | 5A |
| Calcium hypochlorite, hydrated or Calcium hypochlorite, hydrated mixtures, <i>with not less than</i> 5.5 percent but not more than 16 percent water | 5.1 | UN2880 | II, III | 5A | 5A |
| Calcium hypochlorite mixture, dry, corrosive with more than 10 percent but not more than 39 percent available chlorine | 5.1 | UN3486 | III | 5A | 5A |
| Calcium hypochlorite mixtures, dry, <i>with more than 10 percent but not more than 39 percent available chlorine</i> | 5.1 | UN2208 | III | 5A | 5A |
| Calcium manganese silicon | 4.3 | UN2844 | III | Prohibited | 4A |
| Calcium nitrate | 5.1 | UN1454 | III | 5A | 5A |
| Calcium oxide | 8 | UN1910 | III | 8A | 8A |
| Calcium perchlorate | 5.1 | UN1455 | II | 5A | 5A |
| Calcium permanganate | 5.1 | UN1456 | II | 5A | 5A |
| Calcium peroxide | 5.1 | UN1457 | II | 5A | 5A |
| Calcium phosphide | 4.3 | UN1360 | I | Prohibited | Prohibited |
| Calcium, pyrophoric or Calcium alloys, pyrophoric | 4.2 | UN1855 | I | Prohibited | Prohibited |
| Calcium resinate | 4.1 | UN1313 | III | Prohibited | Prohibited |
| Calcium resinate, fused | 4.1 | UN1314 | III | Prohibited | Prohibited |
| <i>Calcium selenate, see Selenates or Selenites</i> | | | | | |
| Calcium silicide | 4.3 | UN1405 | II, III | Prohibited | 4A |
| Camphor oil | 3 | UN1130 | III | Prohibited | 3A |
| Camphor, <i>synthetic</i> | 4.1 | UN2717 | III | Prohibited | Prohibited |
| <i>Cannon primers, see Primers, tubular</i> | | | | | |
| Capacitor, <i>electric double layer (with an energy storage capacity greater than 0.3 Wh)</i> | 9 | UN3499 | n/a | Prohibited | 9C |
| Caproic acid | 8 | UN2829 | III | 8A | 8A |
| <i>Caps, blasting, see Detonators, etc.</i> | | | | | |
| Carbamate pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i> | 3 | UN2758 | I, II | Prohibited | Prohibited |
| Carbamate pesticides, liquid, toxic | 6.1 | UN2992 | I, II | Prohibited | Prohibited |
| Carbamate pesticides, liquid, toxic | 6.1 | UN2992 | III | 6A | 6A |
| Carbamate pesticide, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i> | 6.1 | UN2991 | I, II | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Carbamate pesticide, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i> | 6.1 | UN2991 | III | 6A | 6A |
| Carbamate pesticides, solid, toxic | 6.1 | UN2757 | I, II | Prohibited | Prohibited |
| Carbamate pesticides, solid, toxic | 6.1 | UN2757 | III | 6A | 6A |
| <i>Carbolic acid, see Phenol, solid or Phenol, molten</i> | | | | | |
| <i>Carbolic acid solutions, see Phenol solutions</i> | | | | | |
| Carbon, <i>animal or vegetable origin</i> | 4.2 | UN1361 | II, III | Prohibited | Prohibited |
| Carbon, activated | 4.2 | UN1362 | III | Prohibited | Prohibited |
| Carbon bisulfide, <i>see Carbon disulfide</i> | | | | | |
| Carbon dioxide | 2.2 | UN1013 | n/a | 2B | 2B |
| Carbon dioxide, refrigerated liquid | 2.2 | UN2187 | n/a | 2B | 2B |
| Carbon dioxide, solid, <i>or Dry ice</i> | 9 | UN1845 | III | 9A | 9A |
| Carbon disulfide | 3 | UN1131 | I | Prohibited | Prohibited |
| Carbon monoxide, compressed | 2.3 | UN1016 | n/a | Prohibited | Prohibited |
| Carbon monoxide, refrigerated liquid (<i>cryogenic liquid</i>) | 2.3 | NA9202 | n/a | Prohibited | Prohibited |
| Carbon tetrabromide | 6.1 | UN2516 | III | 6A | 6A |
| Carbon tetrachloride | 6.1 | UN1846 | II | Prohibited | Prohibited |
| <i>Carbonyl chloride, see Phosgene</i> | | | | | |
| Carbonyl fluoride | 2.3 | UN2417 | n/a | Prohibited | Prohibited |
| Carbonyl sulfide | 2.3 | UN2204 | n/a | Prohibited | Prohibited |
| <i>Cartridge cases, empty primed, see Cases, cartridge, empty, with primer</i> | | | | | |
| <i>Cartridges, actuating, for aircraft ejector seat catapult, fire extinguisher, canopy removal or apparatus, see Cartridges, power device</i> | | | | | |
| <i>Cartridges, explosive, see Charges, demolition</i> | | | | | |
| Cartridges, flash | 1.1G | UN0049 | II | Prohibited | Prohibited |
| Cartridges, flash | 1.3G | UN0050 | II | Prohibited | Prohibited |
| Cartridges for weapons, blank | 1.1C | UN0326 | II | Prohibited | Prohibited |
| Cartridges for weapons, blank | 1.2C | UN0413 | II | Prohibited | Prohibited |
| Cartridges for weapons, blank <i>or</i> Cartridges, small arms, blank | 1.3C | UN0327 | II | Prohibited | Prohibited |
| Cartridges for weapons, blank <i>or</i> Cartridges, small arms, blank | 1.4C | UN0338 | II | Prohibited | Prohibited |
| Cartridges for weapons, blank <i>or</i> Cartridges, small arms, blank | 1.4S | UN0014 | II | Prohibited | Prohibited |
| Cartridges for weapons, inert projectile | 1.2C | UN0328 | II | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|-------------------------|----------------------|-------------------|------------------------------|----------------------------------|
| Cartridges for weapons, inert projectile <i>or</i> Cartridges, small arms | 1.3C | UN0417 | II | Prohibited | Prohibited |
| Cartridges for weapons, inert projectile <i>or</i> Cartridges, small arms | 1.4C | UN0339 | II | Prohibited | Prohibited |
| Cartridges for weapons, inert projectile <i>or</i> Cartridges, small arms | 1.4S | UN0012 | II | Prohibited | Prohibited |
| Cartridges for weapons, <i>with bursting charge</i> | 1.1E | UN0006 | II | Prohibited | Prohibited |
| Cartridges for weapons, <i>with bursting charge</i> | 1.1F | UN0005 | II | Prohibited | Prohibited |
| Cartridges for weapons, <i>with bursting charge</i> | 1.2E | UN0321 | II | Prohibited | Prohibited |
| Cartridges for weapons, <i>with bursting charge</i> | 1.2F | UN0007 | II | Prohibited | Prohibited |
| Cartridges for weapons, <i>with bursting charge</i> | 1.4E | UN0412 | II | Prohibited | Prohibited |
| Cartridges for weapons, <i>with bursting charge</i> | 1.4F | UN0348 | II | Prohibited | Prohibited |
| Cartridges, oil well | 1.3C | UN0277 | II | Prohibited | Prohibited |
| Cartridges, oil well | 1.4C | UN0278 | II | Prohibited | Prohibited |
| Cartridges, power device | 1.2C | UN0381 | II | Prohibited | Prohibited |
| Cartridges, power device | 1.3C | UN0275 | II | Prohibited | Prohibited |
| Cartridges, power device | 1.4C | UN0276 | II | Prohibited | Prohibited |
| Cartridges, power device | 1.4S | UN0323 | II | Prohibited | Prohibited |
| <i>Cartridges, safety, blank, see Cartridges for weapons, blank (UN0014)</i> | | | | | |
| <i>Cartridges, safety, see Cartridges for weapons, other than blank or Cartridges, power device (UN0323)</i> | | | | | |
| Cartridges, signal | 1.3G | UN0054 | II | Prohibited | Prohibited |
| Cartridges, signal | 1.4G | UN0312 | II | Prohibited | Prohibited |
| Cartridges, signal | 1.4S | UN0405 | II | Prohibited | Prohibited |
| Cartridges, small arms | Limited Quantity | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Cartridges, sporting, see Cartridges for weapons, inert projectile, or Cartridges, small arms</i> | | | | | |
| <i>Cartridges, starter, jet engine, see Cartridges, power device</i> | | | | | |
| Cases, cartridge, empty with primer | 1.4S | UN0055 | II | Prohibited | Prohibited |
| Cases, cartridges, empty with primer | 1.4C | UN0379 | II | Prohibited | Prohibited |
| Cases, combustible, empty, without primer | 1.4C | UN0446 | II | Prohibited | Prohibited |
| Cases, combustible, empty, without primer | 1.3C | UN0447 | II | Prohibited | Prohibited |
| <i>Casinghead gasoline see Gasoline</i> | | | | | |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|-------------------------|----------------------|-------------------|------------------------------|----------------------------------|
| Castor beans or Castor meal or Castor pomace or Castor flake | 9 | UN2969 | II | Prohibited | 9C |
| Caustic alkali liquids, n.o.s. | 8 | UN1719 | II, III | 8A | 8A |
| <i>Caustic potash, see Potassium hydroxide etc.</i> | | | | | |
| <i>Caustic soda, etc., see Sodium hydroxide etc.</i> | | | | | |
| Cells, containing sodium | 4.3 | UN3292 | II | Prohibited | Prohibited |
| Celluloid, in block, rods, rolls, sheets, tubes, etc., except scrap | 4.1 | UN2000 | III | Prohibited | Prohibited |
| Celluloid, scrap | 4.2 | UN2002 | III | Prohibited | Prohibited |
| <i>Cement, see Adhesives, containing flammable liquid</i> | | | | | |
| Cerium, slabs, ingots, or rods | 4.1 | UN1333 | II | Prohibited | Prohibited |
| Cerium, turnings or gritty powder | 4.3 | UN3078 | II | Prohibited | 4A |
| Cesium or Caesium | 4.3 | UN1407 | I | Prohibited | Prohibited |
| Cesium nitrate or Caesium nitrate | 5.1 | UN1451 | III | 5A | 5A |
| Charcoal briquettes, shell, screenings, wood, etc. | 4.2 | NA1361 | III | Prohibited | 4A |
| Charges, bursting, plastics bonded | 1.1D | UN0457 | II | Prohibited | Prohibited |
| Charges, bursting, plastics bonded | 1.2D | UN0458 | II | Prohibited | Prohibited |
| Charges, bursting, plastics bonded | 1.4D | UN0459 | II | Prohibited | Prohibited |
| Charges, bursting, plastics bonded | 1.4S | UN0460 | II | Prohibited | Prohibited |
| Charges, demolition | 1.1D | UN0048 | II | Prohibited | Prohibited |
| Charges, depth | 1.1D | UN0056 | II | Prohibited | Prohibited |
| <i>Charges, expelling, explosive, for fire extinguishers, see Cartridges, power device</i> | | | | | |
| Charges, explosive, commercial without detonator | 1.1D | UN0442 | II | Prohibited | Prohibited |
| Charges, explosive, commercial without detonator | 1.2D | UN0443 | II | Prohibited | Prohibited |
| Charges, explosive, commercial without detonator | 1.4D | UN0444 | II | Prohibited | Prohibited |
| Charges, explosive, commercial without detonator | 1.4S | UN0445 | II | Prohibited | Prohibited |
| Charges, propelling | 1.1C | UN0271 | II | Prohibited | Prohibited |
| Charges, propelling | 1.2C | UN0415 | II | Prohibited | Prohibited |
| Charges, propelling | 1.3C | UN0272 | II | Prohibited | Prohibited |
| Charges, propelling | 1.4C | UN0491 | II | Prohibited | Prohibited |
| Charges, propelling, for cannon | 1.1C | UN0279 | II | Prohibited | Prohibited |
| Charges, propelling, for cannon | 1.2C | UN0414 | II | Prohibited | Prohibited |
| Charges, propelling, for cannon | 1.3C | UN0242 | II | Prohibited | Prohibited |
| Charges, shaped, without detonator | 1.1D | UN0059 | II | Prohibited | Prohibited |
| Charges, shaped, without detonator | 1.2D | UN0439 | II | Prohibited | Prohibited |
| Charges, shaped, without detonator | 1.4D | UN0440 | II | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Charges, shaped, <i>without detonator</i> | 1.4S | UN0441 | II | Prohibited | Prohibited |
| Charges, shaped, flexible, linear | 1.1D | UN0288 | II | Prohibited | Prohibited |
| Charges, shaped, flexible, linear | 1.4D | UN0237 | II | Prohibited | Prohibited |
| Charges, supplementary explosive | 1.1D | UN0060 | II | Prohibited | Prohibited |
| Chemical kit | 8 | NA1760 | II | 8A | 8A |
| Chemical kits | 9 | UN3316 | II, III | 9C | 9C |
| Chemical under pressure, corrosive, n.o.s. | 2.1 | UN3503 | n/a | Prohibited | 2B |
| Chemical under pressure, flammable, corrosive, n.o.s. | 2.1 | UN3505 | Prohibited | Prohibited | Prohibited |
| Chemical under pressure, flammable, n.o.s. | 2.1 | UN3501 | Prohibited | Prohibited | Prohibited |
| Chemical under pressure, flammable, toxic, n.o.s. | 2.1 | UN3504 | Prohibited | Prohibited | Prohibited |
| Chemical under pressure, n.o.s. | 2.2 | UN3500 | Prohibited | Prohibited | 2B |
| Chemical under pressure, toxic, n.o.s. | 2.2 | UN3502 | Prohibited | Prohibited | 2B |
| Chloral, anhydrous, inhibited | 6.1 | UN2075 | II | Prohibited | Prohibited |
| Chlorate and borate mixtures | 5.1 | UN1458 | II, III | 5A | 5A |
| Chlorate and magnesium chloride mixture solid | 5.1 | UN1459 | II | 5A | 5A |
| Chlorate and magnesium chloride mixture solution | 5.1 | UN3407 | II, III | 5A | 5A |
| <i>Chlorate of potash, see Potassium chlorate</i> | | | | | |
| <i>Chlorate of soda, see Sodium chlorate</i> | | | | | |
| Chlorates, inorganic, aqueous solutions, n.o.s. | 5.1 | UN3210 | II, III | 5A | 5A |
| Chlorates, inorganic, n.o.s. | 5.1 | UN1461 | II | 5A | 5A |
| Chloric acid aqueous solution, <i>with not more than 10 percent chloric acid</i> | 5.1 | UN2626 | II | Prohibited | Prohibited |
| <i>Chloride of phosphorus, see Phosphorus trichloride</i> | | | | | |
| <i>Chloride of sulfur, see Sulfur chloride</i> | | | | | |
| <i>Chlorinated lime, see Calcium hypochlorite mixtures, etc.</i> | | | | | |
| Chlorine | 2.3 | UN1017 | n/a | Prohibited | Prohibited |
| <i>Chlorine azide</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Chlorine dioxide (not hydrate)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Chlorine dioxide, hydrate, frozen | 5.1 | NA9191 | II | Prohibited | Prohibited |
| Chlorine pentafluoride | 2.3 | UN2548 | n/a | Prohibited | Prohibited |
| Chlorine trifluoride | 2.3 | UN1749 | n/a | Prohibited | Prohibited |
| Chlorite solution | 8 | UN1908 | II, III | 8A | 8A |
| Chlorites, inorganic, n.o.s. | 5.1 | UN1462 | II | 5A | 5A |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| 1-Chloro-1,1-difluoroethane <i>or</i> Refrigerant gas R 142b | 2.1 | UN2517 | n/a | Prohibited | 2A |
| 3-Chloro-4-methylphenyl isocyanate, liquid | 6.1 | UN2236 | II | Prohibited | Prohibited |
| 3-Chloro-4-methylphenyl isocyanate, solid | 6.1 | UN3428 | II | Prohibited | Prohibited |
| 1-Chloro-1,2,2,2-tetrafluoroethane <i>or</i> Refrigerant gas R 124 | 2.2 | UN1021 | n/a | 2B | 2B |
| 4-Chloro-o-toluidine hydrochloride, solid | 6.1 | UN1579 | III | 6A | 6A |
| 4-Chloro-o-toluidine hydrochloride, solution | 6.1 | UN3410 | III | 6A | 6A |
| 1-Chloro-2,2,2-trifluoroethane <i>or</i> Refrigerant gas R 133a | 2.2 | UN1983 | n/a | 2B | 2B |
| Chloroacetic acid, molten | 6.1 | UN3250 | II | Prohibited | Prohibited |
| Chloroacetic acid, solid | 6.1 | UN1751 | II | Prohibited | Prohibited |
| Chloroacetic acid, solution | 6.1 | UN1750 | II | Prohibited | Prohibited |
| Chloroacetone, stabilized | 6.1 | UN1695 | I | Prohibited | Prohibited |
| <i>Chloroacetone (unstabilized)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Chloroacetoneitrile | 6.1 | UN2668 | II | Prohibited | Prohibited |
| Chloroacetophenone (CN), <i>liquid</i> | 6.1 | UN3416 | II | Prohibited | Prohibited |
| Chloroacetophenone (CN), <i>solid</i> | 6.1 | UN1697 | II | Prohibited | Prohibited |
| Chloroacetyl chloride | 6.1 | UN1752 | I | Prohibited | Prohibited |
| Chloroanilines, liquid | 6.1 | UN2019 | II | Prohibited | Prohibited |
| Chloroanilines, solid | 6.1 | UN2018 | II | Prohibited | Prohibited |
| Chloroanisidines | 6.1 | UN2233 | III | 6A | 6A |
| Chlorobenzene | 3 | UN1134 | III | Prohibited | 3A |
| <i>Chlorobenzol, see Chlorobenzene</i> | | | | | |
| Chlorobenzotrifluorides | 3 | UN2234 | III | Prohibited | 3A |
| Chlorobenzyl chlorides, liquid | 6.1 | UN2235 | III | 6A | 6A |
| Chlorobenzyl chlorides, solid | 6.1 | UN3427 | III | 6A | 6A |
| Chlorobutanes | 3 | UN1127 | II | Prohibited | 3A |
| Chlorocresols, <i>solution</i> | 6.1 | UN2669 | II, III | Prohibited | Prohibited |
| Chlorocresols, <i>solid</i> | 6.1 | UN3437 | II | Prohibited | Prohibited |
| Chlorodifluorobromomethane <i>or</i> Refrigerant gas R 12B1 | 2.2 | UN1974 | n/a | 2B | 2B |
| Chlorodifluoromethane <i>or</i> Refrigerant gas R 22 | 2.2 | UN1018 | n/a | 2B | 2B |
| Chlorodifluoromethane and chloropentafluoroethane mixture <i>or</i> Refrigerant gas R 502 <i>with fixed boiling point, with approximately 49 percent chlorodifluoromethane</i> | 2.2 | UN1973 | n/a | 2B | 2B |
| Chlorodinitrobenzenes, liquid | 6.1 | UN1577 | II | Prohibited | Prohibited |
| Chlorodinitrobenzenes, solid | 6.1 | UN3441 | II | Prohibited | Prohibited |
| 2-Chloroethanal | 6.1 | UN2232 | I | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Chloroform | 6.1 | UN1888 | III | 6A | 6A |
| Chloroformates, toxic, corrosive, flammable, n.o.s. | 6.1 | UN2742 | II | Prohibited | Prohibited |
| Chloroformates, toxic, corrosive, n.o.s. | 6.1 | UN3277 | II | Prohibited | Prohibited |
| Chloromethyl chloroformate | 6.1 | UN2745 | II | Prohibited | Prohibited |
| Chloromethyl ethyl ether | 3 | UN2354 | II | Prohibited | Prohibited |
| Chloronitroanilines | 6.1 | UN2237 | III | 6A | 6A |
| Chloronitrobenzene, <i>liquid</i> | 6.1 | UN3409 | II | Prohibited | Prohibited |
| Chloronitrobenzenes, <i>solid</i> | 6.1 | UN1578 | II | Prohibited | Prohibited |
| Chloronitrotoluenes, <i>liquid</i> | 6.1 | UN2433 | III | 6A | 6A |
| Chloronitrotoluenes, <i>solid</i> | 6.1 | UN3457 | III | 6A | 6A |
| Chloropentafluoroethane <i>or</i> Refrigerant gas R 115 | 2.2 | UN1020 | n/a | 2B | 2B |
| Chlorophenolates, liquid <i>or</i> Phenolates, liquid | 8 | UN2904 | III | 8A | 8A |
| Chlorophenolates, solid <i>or</i> Phenolates, solid | 8 | UN2905 | III | 8A | 8A |
| Chlorophenols, liquid | 6.1 | UN2021 | III | 6A | 6A |
| Chlorophenols, solid | 6.1 | UN2020 | III | 6A | 6A |
| Chlorophenyltrichlorosilane | 8 | UN1753 | II | Prohibited | Prohibited |
| Chloropicrin | 6.1 | UN1580 | I | Prohibited | Prohibited |
| Chloropicrin and methyl bromide mixtures | 2.3 | UN1581 | n/a | Prohibited | Prohibited |
| Chloropicrin and methyl chloride mixtures | 2.3 | UN1582 | n/a | Prohibited | Prohibited |
| <i>Chloropicrin mixture, flammable (pressure not exceeding 14.7 psia at 115° F flashpoint below 100° F) see Toxic liquids, flammable, etc.</i> | | | | | |
| Chloropicrin mixtures, n.o.s. | 6.1 | UN1583 | I, II, III | Prohibited | Prohibited |
| Chloropivaloyl chloride | 6.1 | NA9263 | I | Prohibited | Prohibited |
| Chloroplatinic acid, solid | 8 | UN2507 | III | 8A | 8A |
| Chloroprene, stabilized | 3 | UN1991 | I | Prohibited | Prohibited |
| <i>Chloroprene, uninhibited</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| 1-Chloropropane | 3 | UN1278 | II | Prohibited | Prohibited |
| 2-Chloropropane | 3 | UN2356 | I | Prohibited | 3A |
| 3-Chloropropanol-1 | 6.1 | UN2849 | III | 6A | 6A |
| 2-Chloropropene | 3 | UN2456 | I | Prohibited | 3A |
| 2-Chloropropionic acid | 8 | UN2511 | III | 8A | 8A |
| 2-Chloropyridine | 6.1 | UN2822 | II | Prohibited | Prohibited |
| Chlorosilanes, corrosive, flammable, n.o.s. | 8 | UN2986 | II | Prohibited | Prohibited |
| Chlorosilanes, corrosive, n.o.s. | 8 | UN2987 | II | 8A | 8A |
| Chlorosilanes, flammable, corrosive, n.o.s. | 3 | UN2985 | II | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|------------------|---------------|------------|-----------------------|---------------------------|
| Chlorosilanes, toxic, corrosive, flammable, n.o.s. | 6.1 | UN3362 | II | Prohibited | Prohibited |
| Chlorosilanes, toxic, corrosive, n.o.s. | 6.1 | UN3361 | II | Prohibited | Prohibited |
| Chlorosilanes, water-reactive, flammable, corrosive, n.o.s. | 4.3 | UN2988 | I | Prohibited | Prohibited |
| Chlorosulfonic acid (<i>with or without sulfur trioxide</i>) | 8 | UN1754 | I | Prohibited | Prohibited |
| Chlorotoluenes | 3 | UN2238 | III | Prohibited | 3A |
| Chlorotoluidines, <i>liquid</i> | 6.1 | UN3429 | III | 6A | 6A |
| Chlorotoluidines, <i>solid</i> | 6.1 | UN2239 | III | 6A | 6A |
| Chlorotrifluoromethane or Refrigerant gas R 13 | 2.2 | UN1022 | n/a | 2B | 2B |
| Chlorotrifluoromethane and trifluoromethane azeotropic mixture or Refrigerant gas R 503 <i>with approximately 60 percent chlorotrifluoromethane</i> | 2.2 | UN2599 | n/a | 2B | 2B |
| Chromic acid, solid | 5.1 | NA1463 | II | Prohibited | Prohibited |
| Chromic acid solution | 8 | UN1755 | II, III | 8A | 8A |
| <i>Chromic anhydride, see Chromium trioxide, anhydrous</i> | | | | | |
| Chromic fluoride, solid | 8 | UN1756 | II | 8A | 8A |
| Chromic fluoride, solution | 8 | UN1757 | II, III | 8A | 8A |
| Chromium nitrate | 5.1 | UN2720 | III | 5A | 5A |
| Chromium oxychloride | 8 | UN1758 | I | Prohibited | Prohibited |
| Chromium trioxide, anhydrous | 5.1 | UN1463 | II | Prohibited | Prohibited |
| Chromosulfuric acid | 8 | UN2240 | I | Prohibited | Prohibited |
| <i>Chromyl chloride, see Chromium oxychloride</i> | | | | | |
| <i>Cigar and cigarette lighters, charged with fuel, see Lighters or Lighter refills containing flammable gas</i> | | | | | |
| Coal briquettes, hot | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Coal gas, compressed | 2.3 | UN1023 | n/a | Prohibited | Prohibited |
| Coal tar distillates, flammable | 3 | UN1136 | II, III | Prohibited | 3A |
| <i>Coal tar dye, corrosive, liquid, n.o.s., see Dyes, liquid or solid, n.o.s. or Dye intermediates, liquid or solid, n.o.s., corrosive</i> | | | | | |
| Coating solution (<i>includes surface treatments or coatings used for industrial or other purposes such as vehicle undercoating, drum or barrel lining</i>) | 3 | UN1139 | I, II, III | Prohibited | 3A |
| Cobalt naphthenates, powder | 4.1 | UN2001 | III | Prohibited | 4A |
| Cobalt resinate, precipitated | 4.1 | UN1318 | III | Prohibited | 4A |
| Coke, hot | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|-------------------------|----------------------|-------------------|------------------------------|----------------------------------|
| <i>Collodion, see Nitrocellulose etc.</i> | | | | | |
| Combustible liquid, n.o.s. | 3 | NA1993 | III | Mailable only per 343 | 3B |
| Components, explosive train, n.o.s. | 1.1B | UN0461 | II | Prohibited | Prohibited |
| Components, explosive train, n.o.s. | 1.2B | UN0382 | II | Prohibited | Prohibited |
| Components, explosive train, n.o.s. | 1.4B | UN0383 | II | Prohibited | Prohibited |
| Components, explosive train, n.o.s. | 1.4S | UN0384 | II | Prohibited | Prohibited |
| <i>Composition B, see Hexolite, etc.</i> | | | | | |
| Compounds, cleaning liquid | 8 | NA1760 | I | Prohibited | Prohibited |
| Compounds, cleaning liquid | 8 | NA1760 | II, III | 8A | 8A |
| Compounds, cleaning liquid | 3 | NA1993 | I, II, III | 8A | 8A |
| Compounds, tree killing liquid <i>or</i> Compounds, weed killing, liquid | 3 | NA1993 | I, II, III | Prohibited | 3A |
| Compounds, tree killing liquid <i>or</i> Compounds, weed killing, liquid | 6.1 | NA2810 | I, II | Prohibited | Prohibited |
| Compounds, tree killing liquid <i>or</i> Compounds, weed killing, liquid | 6.1 | NA2810 | III | 6A | 6A |
| Compounds, tree killing liquid <i>or</i> Compounds, weed killing, liquid | 8 | NA1760 | I | Prohibited | Prohibited |
| Compounds, tree killing liquid <i>or</i> Compounds, weed killing, liquid | 8 | NA1760 | II, III | 8A | 8A |
| Compressed gas, flammable, n.o.s. | 2.1 | UN1954 | n/a | Prohibited | 2A |
| Compressed gas, n.o.s. | 2.2 | UN1956 | n/a | 2B | 2B |
| Compressed gas, oxidizing, n.o.s. | 2.2 | UN3156 | n/a | 2B | 2B |
| Compressed gas, toxic, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i> | 2.3 | UN1955 | n/a | Prohibited | Prohibited |
| Compressed gas, toxic, corrosive, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i> | 2.3 | UN3304 | n/a | Prohibited | Prohibited |
| Compressed gas, toxic, flammable, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i> | 2.3 | UN1953 | n/a | Prohibited | Prohibited |
| Compressed gas, toxic, flammable, corrosive, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i> | 2.3 | UN3305 | n/a | Prohibited | Prohibited |
| Compressed gas, toxic, oxidizing, corrosive, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i> | 2.3 | UN3306 | n/a | Prohibited | Prohibited |
| Compressed gas, toxic, oxidizing, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i> | 2.3 | UN3303 | n/a | Prohibited | Prohibited |
| Consumer Commodity | Limited Quantity | n/a | n/a | See section 334 | See sections 333 and 336 |
| Consumer Commodity | 9 | ID8000 | n/a | n/a | See section 335 |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|------------------|---------------|------------|-----------------------|---------------------------|
| Contrivances, wateractivated, <i>with burster, expelling charge, or propelling charge</i> | 1.2L | UN0248 | II | Prohibited | Prohibited |
| Contrivances, wateractivated, <i>with burster, expelling charge, or propelling charge</i> | 1.3L | UN0249 | II | Prohibited | Prohibited |
| Copper acetoarsenite | 6.1 | UN1585 | II | Prohibited | Prohibited |
| Copper acetylide | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Copper amine azide | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Copper arsenite | 6.1 | UN1586 | II | Prohibited | Prohibited |
| Copper based pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i> | 3 | UN2776 | I, II | Prohibited | Prohibited |
| Copper based pesticides, liquid, toxic | 6.1 | UN3010 | I, II | Prohibited | Prohibited |
| Copper based pesticides, liquid, toxic | 6.1 | UN3010 | III | 6A | 6A |
| Copper based pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i> | 6.1 | UN3009 | I, II | Prohibited | Prohibited |
| Copper based pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23°C</i> | 6.1 | UN3009 | III | 6A | 6A |
| Copper based pesticides, solid, toxic | 6.1 | UN2775 | I, II | Prohibited | Prohibited |
| Copper based pesticides, solid, toxic | 6.1 | UN2775 | III | 6A | 6A |
| Copper chlorate | 5.1 | UN2721 | II | 5A | 5A |
| Copper chloride | 8 | UN2802 | III | 8A | 8A |
| Copper cyanide | 6.1 | UN1587 | II | Prohibited | Prohibited |
| Copper selenate, <i>see Selenates or Selenites</i> | | | | | |
| Copper selenite, <i>see Selenates or Selenites</i> | | | | | |
| Copper tetramine nitrate | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Copra | 4.2 | UN1363 | III | Prohibited | Prohibited |
| Cord, detonating or Fuse, detonating <i>metal clad</i> | 1.1D | UN0290 | II | Prohibited | Prohibited |
| Cord detonating or Fuse detonating <i>metal clad</i> | 1.2D | UN0102 | II | Prohibited | Prohibited |
| Cord, detonating, <i>flexible</i> | 1.1D | UN0065 | II | Prohibited | Prohibited |
| Cord, detonating, <i>flexible</i> | 1.4D | UN0289 | II | Prohibited | Prohibited |
| Cord, detonating, mild effect or Fuse, detonating, mild effect <i>metal clad</i> | 1.4D | UN0104 | II | Prohibited | Prohibited |
| Cord, igniter | 1.4G | UN0066 | II | Prohibited | Prohibited |
| Cordeau <i>detonat fuse, see Cord, detonating, etc.; Cord, detonating, flexible</i> | | | | | |
| Cordite, <i>see Powder, smokeless</i> | | | | | |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|-------------------------|----------------------|-------------------|------------------------------|----------------------------------|
| Corrosive liquid, acidic, inorganic, n.o.s. | 8 | UN3264 | I | Prohibited | Prohibited |
| Corrosive liquid, acidic, inorganic, n.o.s. | 8 | UN3264 | II, III | 8A | 8A |
| Corrosive liquid, acidic, organic, n.o.s. | 8 | UN3265 | I | Prohibited | Prohibited |
| Corrosive liquid, acidic, organic, n.o.s. | 8 | UN3265 | II, III | 8A | 8A |
| Corrosive liquid, basic, inorganic, n.o.s. | 8 | UN3266 | I | Prohibited | Prohibited |
| Corrosive liquid, basic, inorganic, n.o.s. | 8 | UN3266 | II, III | 8A | 8A |
| Corrosive liquid, basic, organic, n.o.s. | 8 | UN3267 | I | Prohibited | Prohibited |
| Corrosive liquid, basic, organic, n.o.s. | 8 | UN3267 | II, III | 8A | 8A |
| Corrosive liquids, flammable, n.o.s. | 8 | UN2920 | I, II | Prohibited | Prohibited |
| Corrosive liquids, n.o.s. | 8 | UN1760 | I | Prohibited | Prohibited |
| Corrosive liquids, n.o.s. | 8 | UN1760 | II, III | 8A | 8A |
| Corrosive liquids, oxidizing, n.o.s. | 8 | UN3093 | I, II | Prohibited | Prohibited |
| Corrosive liquids, self-heating, n.o.s. | 8 | UN3301 | I | Prohibited | Prohibited |
| Corrosive liquids, self-heating, n.o.s. | 8 | UN3301 | II | 8A | 8A |
| Corrosive liquids, toxic, n.o.s. | 8 | UN2922 | I, II | Prohibited | Prohibited |
| Corrosive liquids, toxic, n.o.s. | 8 | UN2922 | III | 8A | 8A |
| Corrosive liquids, water-reactive, n.o.s. | 8 | UN3094 | I, II | Prohibited | Prohibited |
| Corrosive solid, acidic, inorganic, n.o.s. | 8 | UN3260 | I | Prohibited | Prohibited |
| Corrosive solid, acidic, inorganic, n.o.s. | 8 | UN3260 | II, III | 8A | 8A |
| Corrosive solid, acidic, organic, n.o.s. | 8 | UN3261 | I | Prohibited | Prohibited |
| Corrosive solid, acidic, organic, n.o.s. | 8 | UN3261 | II, III | 8A | 8A |
| Corrosive solid, basic, inorganic, n.o.s. | 8 | UN3262 | I | Prohibited | Prohibited |
| Corrosive solid, basic, inorganic, n.o.s. | 8 | UN3262 | II, III | 8A | 8A |
| Corrosive solid, basic, organic, n.o.s. | 8 | UN3263 | I | Prohibited | Prohibited |
| Corrosive solid, basic, organic, n.o.s. | 8 | UN3263 | II, III | 8A | 8A |
| Corrosive solids, flammable, n.o.s. | 8 | UN2921 | I, II | Prohibited | Prohibited |
| Corrosive solids, n.o.s. | 8 | UN1759 | I | Prohibited | Prohibited |
| Corrosive solids, n.o.s. | 8 | UN1759 | II, III | 8A | 8A |
| Corrosive solids, oxidizing, n.o.s. | 8 | UN3084 | I, II | Prohibited | Prohibited |
| Corrosive solids, self-heating, n.o.s. | 8 | UN3095 | I, II | Prohibited | Prohibited |
| Corrosive solids, toxic, n.o.s. | 8 | UN2923 | I, II | Prohibited | Prohibited |
| Corrosive solids, toxic, n.o.s. | 8 | UN2923 | III | 8A | 8A |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Corrosive solids, water-reactive, n.o.s. | 8 | UN3096 | I, II | Prohibited | Prohibited |
| Cotton | 9 | NA1365 | n/a | Prohibited | Prohibited |
| Cotton waste, oily | 4.2 | UN1364 | III | Prohibited | Prohibited |
| Cotton, wet | 4.2 | UN1365 | III | Prohibited | Prohibited |
| Coumarin derivative pesticides, liquid, flammable, toxic, <i>flashpoint less than 23°C</i> | 3 | UN3024 | I, II | Prohibited | Prohibited |
| Coumarin derivative pesticides, liquid, toxic | 6.1 | UN3026 | I, II | Prohibited | Prohibited |
| Coumarin derivative pesticides, liquid, toxic | 6.1 | UN3026 | III | 6A | 6A |
| Coumarin derivative pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23°C</i> | 6.1 | UN3025 | I, II | Prohibited | Prohibited |
| Coumarin derivative pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23°C</i> | 6.1 | UN3025 | III | 6A | 6A |
| Coumarin derivative pesticides, solid, toxic | 6.1 | UN3027 | I, II | Prohibited | Prohibited |
| Coumarin derivative pesticides, solid, toxic | 6.1 | UN3027 | III | 6A | 6A |
| Cresols, liquid | 6.1 | UN2076 | II | Prohibited | Prohibited |
| Cresols, solid | 6.1 | UN3455 | II | Prohibited | Prohibited |
| Cresylic acid | 6.1 | UN2022 | II | Prohibited | Prohibited |
| Crotonaldehyde or Crotonaldehyde, stabilized | 6.1 | UN1143 | I | Prohibited | Prohibited |
| Crotonic acid, <i>liquid</i> | 8 | UN3472 | III | 8A | 8A |
| Crotonic acid, <i>solid</i> | 8 | UN2823 | III | 8A | 8A |
| Crotonylene | 3 | UN1144 | I | Prohibited | 3A |
| Cupriethylenediamine solution | 8 | UN1761 | II | Prohibited | Prohibited |
| Cupriethylenediamine solution | 8 | UN1761 | III | 8A | 8A |
| Cutters, cable, explosive | 1.4S | UN0070 | II | Prohibited | Prohibited |
| <i>Cyanide, or cyanide mixtures, dry, see Cyanides, inorganic, solid, n.o.s.</i> | | | | | |
| Cyanide solutions, n.o.s. | 6.1 | UN1935 | I, II | Prohibited | Prohibited |
| Cyanide solutions, n.o.s. | 6.1 | UN1935 | III | 6A | 6A |
| Cyanides, inorganic, solid, n.o.s. | 6.1 | UN1588 | I, II | Prohibited | Prohibited |
| Cyanides, inorganic, solid, n.o.s. | 6.1 | UN1588 | III | 6A | 6A |
| Cyanogen | 2.3 | UN1026 | n/a | Prohibited | Prohibited |
| Cyanogen bromide | 6.1 | UN1889 | I | Prohibited | Prohibited |
| Cyanogen chloride, stabilized | 2.3 | UN1589 | n/a | Prohibited | Prohibited |
| Cyanuric chloride | 8 | UN2670 | II | Prohibited | Prohibited |
| <i>Cyanuric triazide</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Cyclobutane | 2.1 | UN2601 | n/a | Prohibited | 2A |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Cyclobutyl chloroformate | 6.1 | UN2744 | II | Prohibited | Prohibited |
| 1,5,9-Cyclododecatiene | 6.1 | UN2518 | III | 6A | 6A |
| Cycloheptane | 3 | UN2241 | II | Prohibited | 3A |
| Cycloheptatriene | 3 | UN2603 | II | Prohibited | Prohibited |
| Cycloheptene | 3 | UN2242 | II | Prohibited | 3A |
| Cyclohexane | 3 | UN1145 | II | Prohibited | 3A |
| Cyclohexanone | 3 | UN1915 | III | Prohibited | 3A |
| Cyclohexene | 3 | UN2256 | II | Prohibited | 3A |
| Cyclohexenyltrichlorosilane | 8 | UN1762 | II | Prohibited | Prohibited |
| Cyclohexyl acetate | 3 | UN2243 | III | Prohibited | 3A |
| Cyclohexyl isocyanate | 6.1 | UN2488 | I | Prohibited | Prohibited |
| Cyclohexyl mercaptan | 3 | UN3054 | III | Prohibited | 3A |
| Cyclohexylamine | 8 | UN2357 | II | Prohibited | Prohibited |
| Cyclohexyltrichlorosilane | 8 | UN1763 | II | Prohibited | Prohibited |
| Cyclonite and cyclotetramethylenetetranitramine mixtures, wetted <i>or</i> desensitized see RDX and HMX mixtures, wetted <i>or</i> desensitized, <i>etc.</i> | | | | | |
| Cyclonite and HMX mixtures, wetted <i>or</i> desensitized see RDX and HMX mixtures, wetted <i>or</i> desensitized <i>etc.</i> | | | | | |
| Cyclonite and octogen mixtures, wetted <i>or</i> desensitized see RDX and HMX mixtures, wetted <i>or</i> desensitized <i>etc.</i> | | | | | |
| Cyclonite, see cyclotrimethylenetrinitramine, <i>etc.</i> | | | | | |
| Cyclooctadiene phosphines, see 9-Phosphabicyclononanes | | | | | |
| Cyclooctadienes | 3 | UN2520 | III | Prohibited | 3A |
| Cyclooctatetraene | 3 | UN2358 | II | Prohibited | 3A |
| Cyclopentane | 3 | UN1146 | II | Prohibited | 3A |
| <i>Cyclopentane, methyl</i> , see Methylcyclopentane | | | | | |
| Cyclopentanol | 3 | UN2244 | III | Prohibited | 3A |
| Cyclopentanone | 3 | UN2245 | III | Prohibited | 3A |
| Cyclopentene | 3 | UN2246 | II | Prohibited | 3A |
| Cyclopropane | 2.1 | UN1027 | n/a | Prohibited | 2A |
| <i>Cyclotetramethylene tetranitramine (dry or unphlegmatized) (HMX)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Cyclotetramethylenetetranitramine, desensitized <i>or</i> Octogen, desensitized <i>or</i> HMX, desensitized | 1.1D | UN0484 | II | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|------------------|---------------|------------|-----------------------|---------------------------|
| Cyclotetramethylenetetranitramine, wetted <i>or</i> HMX, wetted <i>or</i> Octogen, wetted with not less than 15 percent water, by mass | 1.1D | UN0226 | II | Prohibited | Prohibited |
| Cyclotrimethylenenitramine and octogen, mixtures, wetted <i>or</i> desensitized see RDX and HMX mixtures, wetted <i>or</i> desensitized <i>etc.</i> | | | | | |
| Cyclotrimethylenetrinitramine and cyclotetramethylenetetranitramine mixtures, wetted <i>or</i> desensitized see RDX and HMX mixtures, wetted <i>or</i> desensitized <i>etc.</i> | | | | | |
| Cyclotrimethylenetrinitramine and HMX mixtures, wetted <i>or</i> desensitized see RDX and HMX mixtures, wetted <i>or</i> desensitized <i>etc.</i> | | | | | |
| Cyclotrimethylenetrinitramine, desensitized <i>or</i> Cyclonite, desensitized <i>or</i> Hexogen, desensitized <i>or</i> RDX, desensitized | 1.1D | UN0483 | II | Prohibited | Prohibited |
| Cyclotrimethylenetrinitramine, wetted <i>or</i> Cyclonite, wetted <i>or</i> Hexogen, wetted <i>or</i> RDX, wetted with not less than 15 percent water by mass | 1.1D | UN0072 | II | Prohibited | Prohibited |
| Cymenes | 3 | UN2046 | III | Prohibited | 3A |
| D | | | | | |
| Dangerous Goods in Machinery <i>or</i> Dangerous Goods in Apparatus | 9 | UN3363 | n/a | Prohibited | Prohibited |
| Decaborane | 4.1 | UN1868 | II | Prohibited | Prohibited |
| Decahydronaphthalene | 3 | UN1147 | III | Prohibited | 3A |
| n-Decane | 3 | UN2247 | III | Prohibited | 3A |
| Deflagrating metal salts of aromatic nitroderivatives, n.o.s. | 1.3C | UN0132 | II | Prohibited | Prohibited |
| <i>Delay electric igniter, see Igniters</i> | | | | | |
| Denatured alcohol | 3 | NA1987 | II, III | Prohibited | 3A |
| <i>Depth charges, see Charges, depth</i> | | | | | |
| Desensitized explosives, liquid, n.o.s. | 3 | UN3379 | I | Prohibited | Prohibited |
| Desensitized explosives, solid, n.o.s. | 4.1 | UN3380 | I | Prohibited | Prohibited |
| <i>Detonating relays, see Detonators, etc.</i> | | | | | |
| Detonator assemblies, non-electric <i>for blasting</i> | 1.1B | UN0360 | II | Prohibited | Prohibited |
| Detonator assemblies, non-electric <i>for blasting</i> | 1.4B | UN0361 | II | Prohibited | Prohibited |
| Detonator assemblies, non-electric <i>for blasting</i> | 1.4S | UN0500 | II | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|------------------|---------------|------------|-----------------------|---------------------------|
| Detonators, electric, <i>for blasting</i> | 1.1B | UN0030 | II | Prohibited | Prohibited |
| Detonators, electric, <i>for blasting</i> | 1.4B | UN0255 | II | Prohibited | Prohibited |
| Detonators, electric, <i>for blasting</i> | 1.4S | UN0456 | II | Prohibited | Prohibited |
| Detonators for ammunition | 1.1B | UN0073 | II | Prohibited | Prohibited |
| Detonators for ammunition | 1.2B | UN0364 | II | Prohibited | Prohibited |
| Detonators for ammunition | 1.4B | UN0365 | II | Prohibited | Prohibited |
| Detonators for ammunition | 1.4S | UN0366 | II | Prohibited | Prohibited |
| Detonators, non-electric, <i>for blasting</i> | 1.1B | UN0029 | II | Prohibited | Prohibited |
| Detonators, non-electric, <i>for blasting</i> | 1.4B | UN0267 | II | Prohibited | Prohibited |
| Detonators, non-electric, <i>for blasting</i> | 1.4S | UN0455 | II | Prohibited | Prohibited |
| Deuterium, compressed | 2.1 | UN1957 | n/a | Prohibited | 2A |
| Devices, small, hydrocarbon gas powered or Hydrocarbon gas refills for small devices <i>with release device</i> | 2.1 | UN3150 | n/a | Prohibited | 2A |
| Di-n-amylamine | 3 | UN2841 | III | Prohibited | 3A |
| <i>Di-n-butyl peroxydicarbonate, with more than 52 percent in solution</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Di-n-butylamine | 8 | UN2248 | II | Prohibited | Prohibited |
| <i>2,2-Di-(tert-butylperoxy) butane, with more than 55 percent in solution</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>D-i(tert-butylperoxy) phthalate, with more than 55 percent in solution</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>2,2-Di-(4,4-di-tert-butylperoxycyclohexyl) propane, with more than 42 percent with inert solid</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>D-i2,4-dichlorobenzoyl peroxide, with more than 75 percent with water</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| 1,2-Di-(dimethylamino)ethane | 3 | UN2372 | II | Prohibited | 3A |
| <i>Di-2-ethylhexyl phosphoric acid, see Diisooctyl acid phosphate</i> | | | | | |
| <i>Di-(1-hydroxytetrazole) (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Di-(1-naphthoyl) peroxide</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Di-(beta-nitroxyethyl) ammonium nitrate</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>a,a'-Di-(nitroxy) methylether</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Diacetone alcohol | 3 | UN1148 | II, III | Prohibited | 3A |
| <i>Diacetone alcohol peroxides, with more than 57 percent in solution with more than 9 percent hydrogen peroxide, less than 26 percent diacetone alcohol and less than 9 percent water; total active oxygen content more than 9 percent by mass</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Diacetyl, see Butanedione</i> | | | | | |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|------------------|---------------|------------|-----------------------|---------------------------|
| <i>Diacetyl peroxide, solid, or with more than 25 percent in solution</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Diallylamine | 3 | UN2359 | II | Prohibited | Prohibited |
| Diallylether | 3 | UN2360 | II | Prohibited | Prohibited |
| 4,4'-Diaminodiphenyl methane | 6.1 | UN2651 | III | 6A | 6A |
| <i>p</i> -Diazidobenzene | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| 1,2-Diazidoethane | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| 1,1'-Diazoaminonaphthalene | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Diazoaminotetrazole (dry) | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Diazodinitrophenol (dry) | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Diazodinitrophenol, wetted with not less than 40 percent water or mixture of alcohol and water, by mass | 1.1A | UN0074 | II | Prohibited | Prohibited |
| Diazodiphenylmethane | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Diazonium nitrates (dry) | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Diazonium perchlorates (dry) | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| 1,3-Diazopropane | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Dibenzyl peroxydicarbonate, with more than 87 percent with water | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Dibenzylchlorosilane | 8 | UN2434 | II | 8A | 8A |
| Diborane | 2.3 | UN1911 | n/a | Prohibited | Prohibited |
| Diborane mixtures | 2.1 | NA1911 | n/a | Prohibited | Prohibited |
| Dibromoacetylene | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| 1,2-Dibromobutan-3-one | 6.1 | UN2648 | II | Prohibited | Prohibited |
| Dibromochloropropane | 6.1 | UN2872 | III | 6A | 6A |
| Dibromodifluoromethane, <i>R12B2</i> | 9 | UN1941 | III | 9C | 9C |
| 1,2-Dibromoethane, see Ethylene dibromide | | | | | |
| Dibromomethane | 6.1 | UN2664 | III | 6A | 6A |
| Dibutyl ethers | 3 | UN1149 | III | Prohibited | 3B |
| Dibutylaminoethanol | 6.1 | UN2873 | III | 6A | 6A |
| N,N'-Dichlorazodicarbonamidine (salts of) (dry) | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| 1,1-Dichloro-1-nitroethane | 6.1 | UN2650 | II | Prohibited | Prohibited |
| 3,5-Dichloro-2,4,6-trifluoropyridine | 6.1 | NA9264 | I | Prohibited | Prohibited |
| Dichloroacetic acid | 8 | UN1764 | II | 8A | 8A |
| 1,3-Dichloroacetone | 6.1 | UN2649 | II | Prohibited | Prohibited |
| Dichloroacetyl chloride | 8 | UN1765 | II | 8A | 8A |
| <i>Dichloroacetylene</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Dichloroanilines, liquid | 6.1 | UN1590 | II | Prohibited | Prohibited |
| Dichloroanilines, solid | 6.1 | UN3442 | II | Prohibited | Prohibited |
| o-Dichlorobenzene | 6.1 | UN1591 | III | 6A | 6A |
| Dichlorobutene | 8 | NA2920 | I | Prohibited | Prohibited |
| 2,2'-Dichlorodiethyl ether | 6.1 | UN1916 | II | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|------------------|------------------|------------|-----------------------|---------------------------|
| Dichlorodifluoromethane <i>or</i> Refrigerant gas R 12 | 2.2 | UN1028 | n/a | 2B | 2B |
| Dichlorodifluoromethane and difluoroethane azeotropic mixture <i>or</i> Refrigerant gas R 500 with approximately 74 percent dichlorodifluoromethane | 2.2 | UN2602 | n/a | 2B | 2B |
| Dichlorodimethyl ether, symmetrical | 6.1 | UN2249 | I | Prohibited | Prohibited |
| 1,1-Dichloroethane | 3 | UN2362 | II | Prohibited | 3A |
| 1,2-Dichloroethane, see Ethylene dichloride | | | | | |
| Dichloroethyl sulfide | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| 1,2-Dichloroethylene | 3 | UN1150 | II | Prohibited | 3A |
| Dichlorofluoromethane <i>or</i> Refrigerant gas R 21 | 2.2 | UN1029 | n/a | 2B | 2B |
| Dichloroisocyanuric acid, dry <i>or</i> Dichloroisocyanuric acid salts | 5.1 | UN2465 | II | 5A | 5A |
| Dichlorodisopropyl ether | 6.1 | UN2490 | II | Prohibited | Prohibited |
| Dichloromethane | 6.1 | UN1593 | III | 6A | 6A |
| Dichloropentanes | 3 | UN1152 | III | Prohibited | 3A |
| Dichlorophenyl isocyanates | 6.1 | UN2250 | II | Prohibited | Prohibited |
| Dichlorophenyltrichlorosilane | 8 | UN1766 | II | Prohibited | Prohibited |
| 1,2-Dichloropropane | 3 | UN1279 | II | Prohibited | 3A |
| 1,3-Dichloropropanol2 | 6.1 | UN2750 | II | Prohibited | Prohibited |
| Dichloropropene and propylene dichloride mixture, see 1,2-Dichloropropane | | | | | |
| Dichloropropenes | 3 | UN2047 | II, III | Prohibited | 3A |
| Dichlorosilane | 2.3 | UN2189 | n/a | Prohibited | Prohibited |
| 1,2-Dichloro-1,1,2,2-Tetrafluoroethane <i>or</i> Refrigerant gas R 114 | 2.2 | UN1958 | n/a | 2B | 2B |
| Dichlorovinylchloroarsine | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Dicycloheptadiene, see Bicyclo [2,2,1]hepta-2,5-diene, stabilized | | | | | |
| Dicyclohexylamine | 8 | UN2565 | III | 8A | 8A |
| Dicyclohexylammonium nitrate | 4.1 | UN2687 | III | Prohibited | 4A |
| Dicyclopentadiene | 3 | UN2048 | III | Prohibited | 3A |
| Didymium nitrate | 5.1 | UN1465 | III | 5A | 5A |
| Diesel fuel | 3 | NA1993 UN1202 | III | Prohibited | 3A |
| Diethanol nitrosamine dinitrate (dry) | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Diethoxymethane | 3 | UN2373 | II | Prohibited | 3A |
| 3,3-Diethoxypropene | 3 | UN2374 | II | Prohibited | 3A |
| Diethyl carbonate | 3 | UN2366 | III | Prohibited | 3A |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| <i>Diethyl cellosolve, see Ethylene glycol diethyl ether</i> | | | | | |
| Diethyl ether or Ethyl ether | 3 | UN1155 | I | Prohibited | 3A |
| Diethyl ketone | 3 | UN1156 | II | Prohibited | 3A |
| <i>Diethyl peroxydicarbonate, with more than 27 percent in solution</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Diethyl sulfate | 6.1 | UN1594 | II | Prohibited | Prohibited |
| Diethyl sulfide | 3 | UN2375 | II | Prohibited | Prohibited |
| Diethylamine | 3 | UN1154 | II | Prohibited | Prohibited |
| 2-Diethylaminoethanol | 8 | UN2686 | II | Prohibited | Prohibited |
| 3-Diethylamino-propylamine | 3 | UN2684 | III | Prohibited | 3A |
| N,N-Diethylaniline | 6.1 | UN2432 | III | 6A | 6A |
| Diethylbenzene | 3 | UN2049 | III | Prohibited | 3A |
| Diethyldichlorosilane | 8 | UN1767 | II | Prohibited | Prohibited |
| Diethylene glycol dinitrate | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Diethyleneglycol dinitrate, desensitized with not less than 25 percent nonvolatile water-insoluble phlegmatizer, by mass | 1.1D | UN0075 | II | Prohibited | Prohibited |
| Diethylenetriamine | 8 | UN2079 | II | 8A | 8A |
| N,N-Diethylethylenediamine | 8 | UN2685 | II | Prohibited | Prohibited |
| <i>Diethylgold bromide</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Diethylthiophosphoryl chloride | 8 | UN2751 | II | Prohibited | Prohibited |
| <i>Difluorochloroethanes, see 1-Chloro-1,1-difluoroethanes</i> | | | | | |
| 1,1-Difluoroethane or Refrigerant gas R 152a | 2.1 | UN1030 | n/a | Prohibited | 2A |
| 1,1-Difluoroethylene or Refrigerant gas R 1132a | 2.1 | UN1959 | n/a | Prohibited | 2A |
| Difluoromethane or Refrigerant gas R 32 | 2.1 | UN3252 | n/a | Prohibited | 2A |
| Difluorophosphoric acid, anhydrous | 8 | UN1768 | II | Prohibited | Prohibited |
| 2,3-Dihdropyran | 3 | UN2376 | II | Prohibited | 3A |
| <i>1,8-Dihydroxy-2,4,5,7-tetranitroanthraquinone (chrysamminic acid)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Diiodoacetylene</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Diisobutyl ketone | 3 | UN1157 | III | Prohibited | 3A |
| Diisobutylamine | 3 | UN2361 | III | Prohibited | 3A |
| Diisobutylene, isomeric compounds | 3 | UN2050 | II | Prohibited | 3A |
| Diisooctyl acid phosphate | 8 | UN1902 | III | 8A | 8A |
| Diisopropyl ether | 3 | UN1159 | II | Prohibited | 3A |
| Diisopropylamine | 3 | UN1158 | II | Prohibited | Prohibited |
| <i>Diisopropylbenzene hydroperoxide, with more than 72 percent in solution</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Diketene, stabilized | 6.1 | UN2521 | I | Prohibited | Prohibited |
| 1,2-Dimethoxyethane | 3 | UN2252 | II | Prohibited | 3A |
| 1,1-Dimethoxyethane | 3 | UN2377 | II | Prohibited | 3A |
| Dimethyl carbonate | 3 | UN1161 | II | Prohibited | 3A |
| <i>Dimethyl chlorothiophosphate, see Dimethyl thiophosphoryl chloride</i> | | | | | |
| <i>2,5-Dimethyl-2,5-dihydroperoxy hexane, with more than 82 percent with water</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Dimethyl disulfide | 3 | UN2381 | II | Prohibited | 3A |
| Dimethyl ether | 2.1 | UN1033 | n/a | Prohibited | 2A |
| Dimethyl sulfate | 6.1 | UN1595 | I | Prohibited | Prohibited |
| Dimethyl sulfide | 3 | UN1164 | II | Prohibited | Prohibited |
| Dimethyl thiophosphoryl chloride | 6.1 | UN2267 | II | Prohibited | Prohibited |
| Dimethyl-N-propylamine | 3 | UN2266 | II | Prohibited | Prohibited |
| Dimethylamine, anhydrous | 2.1 | UN1032 | n/a | Prohibited | Prohibited |
| Dimethylamine solution | 3 | UN1160 | II | Prohibited | Prohibited |
| 2-Dimethylaminoacetonitrile | 3 | UN2378 | II | Prohibited | Prohibited |
| 2-Dimethylaminoethanol | 8 | UN2051 | II | 8A | 8A |
| 2-Dimethylaminoethyl acrylate | 6.1 | UN3302 | II | Prohibited | Prohibited |
| 2-Dimethylaminoethyl methacrylate | 6.1 | UN2522 | II | Prohibited | Prohibited |
| N,N-Dimethylaniline | 6.1 | UN2253 | II | Prohibited | Prohibited |
| 2,3-Dimethylbutane | 3 | UN2457 | II | Prohibited | 3A |
| 1,3-Dimethylbutylamine | 3 | UN2379 | II | Prohibited | Prohibited |
| Dimethylcadamoyl chloride | 8 | UN2262 | II | 8A | 8A |
| Dimethylcyclohexanes | 3 | UN2263 | II | Prohibited | 3A |
| N,N-Dimethylcyclohexylamine | 8 | UN2264 | II | 8A | 8A |
| Dimethyldichlorosilane | 3 | UN1162 | II | Prohibited | Prohibited |
| Dimethyldiethoxysilane | 3 | UN2380 | II | Prohibited | 3A |
| Dimethyldioxanes | 3 | UN2707 | II, III | Prohibited | 3A |
| N,N-Dimethylformamide | 3 | UN2265 | III | Prohibited | 3A |
| <i>Dimethylhexane dihydroperoxide (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Dimethylhydrazine, symmetrical | 6.1 | UN2382 | I | Prohibited | Prohibited |
| Dimethylhydrazine, unsymmetrical | 6.1 | UN1163 | I | Prohibited | Prohibited |
| 2,2-Dimethylpropane | 2.1 | UN2044 | n/a | Prohibited | 2A |
| Dintro-o-cresol | 6.1 | UN1598 | II | Prohibited | Prohibited |
| <i>1,4-Dinitro-1,1,4,4-tetramethylolbutanetetranitrate (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>2,4-Dinitro-1,3,5-trimethylbenzene</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>1,3-Dinitro-4,5-dinitrosobenzene</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>1,3-Dinitro-5,5-dimethyl hydantoin</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Dinitro-7,8-dimethylglycoluril (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Dinitroanilines | 6.1 | UN1596 | II | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|-------------------------|----------------------|-------------------|------------------------------|----------------------------------|
| Dinitrobenzenes, <i>liquid</i> | 6.1 | UN1597 | II | Prohibited | Prohibited |
| Dinitrobenzenes, <i>solid</i> | 6.1 | UN3443 | II | Prohibited | Prohibited |
| <i>Dinitrochlorobenzene, see Chlorodinitrobenzenes</i> | | | | | |
| <i>1,2-Dinitroethane</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>1,1-Dinitroethane (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Dinitrogen tetroxide | 2.3 | UN1067 | n/a | Prohibited | Prohibited |
| Dinitroglucuril or Dingy | 1.1D | UN0489 | II | Prohibited | Prohibited |
| <i>Dinitromethane</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Dinitrophenol, <i>dry or wetted with less than 15 percent water, by mass</i> | 1.1D | UN0076 | II | Prohibited | Prohibited |
| Dinitrophenol solutions | 6.1 | UN1599 | II | Prohibited | Prohibited |
| Dinitrophenol, <i>wetted with not less than 15 percent water, by mass</i> | 4.1 | UN1320 | I | Prohibited | Prohibited |
| Dinitrophenolates <i>alkali metals, dry or wetted with less than 15 percent water, by mass</i> | 1.3C | UN0077 | II | Prohibited | Prohibited |
| Dinitrophenolates, <i>wetted with not less than 15 percent water, by mass</i> | 4.1 | UN1321 | I | Prohibited | Prohibited |
| <i>Dinitropropylene glycol</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>2,4-Dinitroresorcinol (heavy metal salts of) (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>4,6-Dinitroresorcinol (heavy metal salts of) (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Dinitroresorcinol, <i>dry or wetted with less than 15 percent water, by mass</i> | 1.1D | UN0078 | II | Prohibited | Prohibited |
| Dinitroresorcinol, <i>wetted with not less than 15 percent water, by mass</i> | 4.1 | UN1322 | I | Prohibited | Prohibited |
| <i>3,5-Dinitrosalicylic acid (lead salt) (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Dinitrosobenzene | 1.3C | UN0406 | II | Prohibited | Prohibited |
| <i>Dinitrosobenzylamidine and salts of (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| 2,2-Dinitrostilbene | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Dinitrotoluenes, <i>liquid</i> | 6.1 | UN2038 | II | Prohibited | Prohibited |
| Dinitrotoluenes, molten | 6.1 | UN1600 | II | Prohibited | Prohibited |
| Dinitrotoluenes, <i>solid</i> | 6.1 | UN3454 | II | Prohibited | Prohibited |
| <i>1,9-Dinitroxy pentamethylene2,4,6,8-tetramine (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Dioxane | 3 | UN1165 | II | Prohibited | 3A |
| Dioxolane | 3 | UN1166 | II | Prohibited | 3A |
| Dipentene | 3 | UN2052 | III | Prohibited | 3A |
| Diphenylamine chloroarsine | 6.1 | UN1698 | I | Prohibited | Prohibited |
| Diphenylchloroarsine, liquid | 6.1 | UN1699 | I | Prohibited | Prohibited |
| Diphenylchloroarsine, solid | 6.1 | UN3450 | I | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|-------------------------|----------------------|-------------------|------------------------------|----------------------------------|
| Diphenyldichlorosilane | 8 | UN1769 | II | Prohibited | Prohibited |
| Diphenylmethyl bromide | 8 | UN1770 | II | 8A | 8A |
| Dipicryl sulfide, <i>dry or wetted with less than 10 percent water, by mass</i> | 1.1D | UN0401 | II | Prohibited | Prohibited |
| Dipicryl sulfide, <i>wetted with not less than 10 percent water, by mass</i> | 4.1 | UN2852 | I | Prohibited | Prohibited |
| Dipicrylamine, see Hexanitrodiphenylamine | | | | | |
| <i>Dipropionyl peroxide, with more than 28 percent in solution</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Di-n-propyl ether | 3 | UN2384 | II | Prohibited | 3A |
| Dipropyl ketone | 3 | UN2710 | III | Prohibited | 3A |
| Dipropylamine | 3 | UN2383 | II | Prohibited | Prohibited |
| Disinfectants, liquid, corrosive, n.o.s. | 8 | UN1903 | I | Prohibited | Prohibited |
| Disinfectants, liquid, corrosive, n.o.s. | 8 | UN1903 | II, III | 8A | 8A |
| Disinfectants, liquid, toxic, n.o.s. | 6.1 | UN3142 | I, II | Prohibited | Prohibited |
| Disinfectants, liquid, toxic, n.o.s. | 6.1 | UN3142 | III | 6A | 6A |
| Disinfectants, solid, toxic, n.o.s. | 6.1 | UN1601 | II | Prohibited | Prohibited |
| Disinfectants, solid, toxic, n.o.s. | 6.1 | UN1601 | III | 6A | 6A |
| Disodium trioxosilicate | 8 | UN3253 | III | 8A | 8A |
| Dispersant gases, n.o.s. see Refrigerant gases, n.o.s. | | | | | |
| Divinyl ether, stabilized | 3 | UN1167 | I | Prohibited | Prohibited |
| Dodecyltrichlorosilane | 8 | UN1771 | II | Prohibited | Prohibited |
| Dry ice, see Carbon dioxide, solid | | | | | |
| Dyes, liquid, corrosive, n.o.s. <i>or</i> Dye intermediates, liquid, corrosive, n.o.s. | 8 | UN2801 | I | Prohibited | Prohibited |
| Dyes, liquid, corrosive, n.o.s. <i>or</i> Dye intermediates, liquid, corrosive, n.o.s. | 8 | UN2801 | II, III | 8A | 8A |
| Dyes, liquid, toxic, n.o.s. <i>or</i> Dye intermediates, liquid, toxic, n.o.s. | 6.1 | UN1602 | II | Prohibited | Prohibited |
| Dyes, liquid, toxic, n.o.s. <i>or</i> Dye intermediates, liquid, toxic, n.o.s. | 6.1 | UN1602 | III | 6A | 6A |
| Dyes, solid, corrosive, n.o.s. <i>or</i> Dye intermediates, solid, corrosive, n.o.s. | 8 | UN3147 | I | Prohibited | Prohibited |
| Dyes, solid, corrosive, n.o.s. <i>or</i> Dye intermediates, solid, corrosive, n.o.s. | 8 | UN3147 | II, III | 8A | 8A |
| Dyes, solid, toxic, n.o.s. <i>or</i> Dye intermediates, solid, toxic, n.o.s. | 6.1 | UN3143 | I, II | Prohibited | Prohibited |
| Dyes, solid, toxic, n.o.s. <i>or</i> Dye intermediates, solid, toxic, n.o.s. | 6.1 | UN3143 | III | 6A | 6A |
| <i>Dynamite, see Explosive, blasting, type A</i> | | | | | |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|------------------|---------------|------------|--------------------------|---------------------------|
| E | | | | | |
| Electrolyte (<i>acid or alkali</i>) for batteries, see Battery fluid, acid or Battery fluid, alkali | | | | | |
| Elevated temperature liquid, flammable, n.o.s., <i>with flashpoint above 37.8° C, at or above its flashpoint</i> | 3 | UN3256 | III | Prohibited | Prohibited |
| Elevated temperature liquid, n.o.s., <i>at or above 100° C and below its flashpoint (including molten metals, molten salts, etc.)</i> | 9 | UN3257 | III | Prohibited | Prohibited |
| Elevated temperature solid, n.o.s., <i>at or above 240° C, see 49 CFR 173.247(h)(4)</i> | 9 | UN3258 | III | Prohibited | Prohibited |
| Engines, internal combustion, flammable gas powered | 9 | UN3166 | n/a | Prohibited | Prohibited |
| Engines, internal combustion, flammable liquid powered | 9 | UN3166 | n/a | Prohibited | Prohibited |
| Environmentally hazardous substances, liquid, n.o.s. | 9 | UN3082 | III | 9C | 9C |
| Environmentally hazardous substances, solid, n.o.s. | 9 | UN3077 | III | 9C | 9C |
| Epibromohydrin | 6.1 | UN2558 | I | Prohibited | Prohibited |
| Epichlorohydrin | 6.1 | UN2023 | II | Prohibited | Prohibited |
| 1,2-Epoxy-3-ethoxypropane | 3 | UN2752 | III | Prohibited | 3A |
| Esters, n.o.s. | 3 | UN3272 | II, III | Prohibited | 3A |
| <i>Etching acid, liquid, n.o.s., see Hydrofluoric acid, solution etc.</i> | | | | | |
| Ethane | 2.1 | UN1035 | n/a | Prohibited | 2A |
| EthanePropane mixture, refrigerated liquid | 2.1 | NA1961 | n/a | Prohibited | Prohibited |
| Ethane, refrigerated liquid | 2.1 | UN1961 | n/a | Prohibited | Prohibited |
| Ethanol or Ethyl alcohol or Ethanol solutions or Ethyl alcohol solutions | 3 | UN1170 | II, III | Mailable only per 343.27 | 3A |
| <i>Ethanol amine dinitrate</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Ethanol and gasoline mixture or Ethanol and motor spirit mixture or Ethanol and petrol mixture, <i>with more than 10% ethanol.</i> | 3 | UN3475 | II | Prohibited | Prohibited |
| Ethanolamine or Ethanolamine solutions | 8 | UN2491 | III | 8A | 8A |
| <i>Ether, see Diethyl ether</i> | | | | | |
| Ethers, n.o.s. | 3 | UN3271 | II, III | Prohibited | 3A |
| Ethyl acetate | 3 | UN1173 | II | Prohibited | 3A |
| Ethyl acrylate, stabilized | 3 | UN1917 | II | Prohibited | 3A |
| Ethyl alcohol, see Ethanol | | | | | |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| <i>Ethyl aldehyde, see Acetaldehyde</i> | | | | | |
| Ethyl amyl ketone | 3 | UN2271 | III | Prohibited | 3A |
| N-Ethylbenzyltoluidines, solid | 6.1 | UN3460 | III | 6A | 6A |
| N-Ethyl-N-benzylaniline | 6.1 | UN2274 | III | 6A | 6A |
| Ethyl borate | 3 | UN1176 | II | Prohibited | 3A |
| Ethyl bromide | 6.1 | UN1891 | II | Prohibited | Prohibited |
| Ethyl bromoacetate | 6.1 | UN1603 | II | Prohibited | Prohibited |
| Ethyl butyl ether | 3 | UN1179 | II | Prohibited | 3A |
| Ethyl butyrate | 3 | UN1180 | III | Prohibited | 3A |
| Ethyl chloride | 2.1 | UN1037 | n/a | Prohibited | Prohibited |
| Ethyl chloroacetate | 6.1 | UN1181 | II | Prohibited | Prohibited |
| Ethyl chloroformate | 6.1 | UN1182 | I | Prohibited | Prohibited |
| Ethyl 2-chloropropionate | 3 | UN2935 | III | Prohibited | 3A |
| Ethyl chlorothioformate | 8 | UN2826 | II | Prohibited | Prohibited |
| Ethyl crotonate | 3 | UN1862 | II | Prohibited | 3A |
| Ethyl ether, see Diethyl ether | | | | | |
| Ethyl fluoride or Refrigerant gas R 161 | 2.1 | UN2453 | n/a | Prohibited | 2A |
| Ethyl formate | 3 | UN1190 | II | Prohibited | 3A |
| <i>Ethyl hydroperoxide</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Ethyl isobutyrate | 3 | UN2385 | II | Prohibited | 3A |
| Ethyl isocyanate | 3 | UN2481 | I | Prohibited | Prohibited |
| Ethyl lactate | 3 | UN1192 | III | Prohibited | 3A |
| Ethyl mercaptan | 3 | UN2363 | I | Prohibited | Prohibited |
| Ethyl methacrylate, stabilized | 3 | UN2277 | II | Prohibited | 3A |
| Ethyl methyl ether | 2.1 | UN1039 | n/a | Prohibited | Prohibited |
| Ethyl methyl ketone or Methyl ethyl ketone | 3 | UN1193 | II | Prohibited | 3A |
| Ethyl nitrate solutions | 3 | UN1194 | I | Prohibited | Prohibited |
| Ethyl orthoformate | 3 | UN2524 | III | Prohibited | 3A |
| Ethyl oxalate | 6.1 | UN2525 | III | 6A | 6A |
| <i>Ethyl perchlorate</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Ethyl phosphonothioic dichloride, anhydrous | 6.1 | NA2927 | I | Prohibited | Prohibited |
| Ethyl phosphonous dichloride, anhydrous <i>pyrophoric liquid</i> | 6.1 | NA2845 | I | Prohibited | Prohibited |
| Ethyl phosphorodichloridate | 6.1 | NA2927 | I | Prohibited | Prohibited |
| Ethyl propionate | 3 | UN1195 | II | Prohibited | 3A |
| Ethyl propyl ether | 3 | UN2615 | II | Prohibited | 3A |
| <i>Ethyl silicate, see Tetraethyl silicate</i> | | | | | |
| Ethylacetylene, stabilized | 2.1 | UN2452 | n/a | Prohibited | Prohibited |
| Ethylamine | 2.1 | UN1036 | n/a | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Ethylamine, aqueous solution <i>with not less than 50 percent but not more than 70 percent ethylamine</i> | 3 | UN2270 | II | Prohibited | Prohibited |
| N-Ethylaniline | 6.1 | UN2272 | III | 6A | 6A |
| 2-Ethylaniline | 6.1 | UN2273 | III | 6A | 6A |
| Ethylbenzene | 3 | UN1175 | II | Prohibited | 3A |
| N-Ethylbenzyltoluidines liquid | 6.1 | UN2753 | III | 6A | 6A |
| 2-Ethylbutanol | 3 | UN2275 | III | Prohibited | 3A |
| 2-Ethylbutyl acetate | 3 | UN1177 | III | Prohibited | 3A |
| 2-Ethylbutyraldehyde | 3 | UN1178 | II | Prohibited | 3A |
| Ethylchloroarsine | 6.1 | UN1892 | I | Prohibited | Prohibited |
| Ethylchlorosilane | 4.3 | UN1183 | I | Prohibited | Prohibited |
| Ethylene, acetylene and propylene in mixture, refrigerated liquid <i>with at least 71.5 percent ethylene with not more than 22.5 percent acetylene and not more than 6 percent propylene</i> | 2.1 | UN3138 | n/a | Prohibited | Prohibited |
| Ethylene chlorohydrin | 6.1 | UN1135 | I | Prohibited | Prohibited |
| Ethylene | 2.1 | UN1962 | n/a | Prohibited | 2A |
| <i>Ethylene diamine diperchlorate</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Ethylene dibromide | 6.1 | UN1605 | I | Prohibited | Prohibited |
| <i>Ethylene dibromide and methyl bromide liquid mixtures, see Methyl bromide and ethylene dibromide mixtures, liquid</i> | | | | | |
| Ethylene dichloride | 3 | UN1184 | II | Prohibited | Prohibited |
| Ethylene glycol diethyl ether | 3 | UN1153 | III | Prohibited | 3A |
| <i>Ethylene glycol dinitrate</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Ethylene glycol monoethyl ether | 3 | UN1171 | III | Prohibited | 3A |
| Ethylene glycol monoethyl ether acetate | 3 | UN1172 | III | Prohibited | 3A |
| Ethylene glycol monomethyl ether | 3 | UN1188 | III | Prohibited | 3A |
| Ethylene glycol monomethyl ether acetate | 3 | UN1189 | III | Prohibited | 3A |
| Ethylene oxide or Ethylene oxide with nitrogen <i>up to a total pressure of 1MPa (10 bar) at 50° C</i> | 2.3 | UN1040 | n/a | Prohibited | Prohibited |
| Ethylene oxide and carbon dioxide mixtures <i>with more than 87 percent ethylene oxide</i> | 2.3 | UN3300 | n/a | Prohibited | Prohibited |
| Ethylene oxide and carbon dioxide mixtures <i>with more than 9 percent but not more than 87 percent ethylene oxide</i> | 2.1 | UN1041 | n/a | Prohibited | 2A |
| Ethylene oxide and carbon dioxide mixtures <i>with not more than 9 percent ethylene oxide</i> | 2.2 | UN1952 | n/a | 2B | 2B |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|------------------|---------------|------------|-----------------------|---------------------------|
| Ethylene oxide and chlorotetrafluoroethane mixture with not more than 8.8 percent ethylene oxide | 2.2 | UN3297 | n/a | 2B | 2B |
| Ethylene oxide and dichlorodifluoromethane mixture with not more than 12.5 percent ethylene oxide | 2.2 | UN3070 | n/a | 2B | 2B |
| Ethylene oxide and pentafluoroethane mixture with not more than 7.9 percent ethylene oxide | 2.2 | UN3298 | n/a | 2B | 2B |
| Ethylene oxide and propylene oxide mixtures with not more than 30 percent ethylene oxide | 3 | UN2983 | I | Prohibited | Prohibited |
| Ethylene oxide and tetrafluoroethane mixture with not more than 5.6 percent ethylene oxide | 2.2 | UN3299 | n/a | 2B | 2B |
| Ethylene, refrigerated liquid (cryogenic liquid) | 2.1 | UN1038 | n/a | Prohibited | Prohibited |
| Ethylenediamine | 8 | UN1604 | II | 8A | 8A |
| Ethyleneimine, stabilized | 6.1 | UN1185 | I | Prohibited | Prohibited |
| <i>Ethylhexaldehyde, see Octyl aldehydes etc.</i> | | | | | |
| 2-Ethylhexyl chloroformate | 6.1 | UN2748 | II | Prohibited | Prohibited |
| 2-Ethylhexylamine | 3 | UN2276 | III | Prohibited | 3A |
| Ethylphenyldichlorosilane | 8 | UN2435 | II | Prohibited | Prohibited |
| 1-Ethylpiperidine | 3 | UN2386 | II | Prohibited | Prohibited |
| N-Ethyltoluidines | 6.1 | UN2754 | II | Prohibited | Prohibited |
| Ethyltrichlorosilane | 3 | UN1196 | II | Prohibited | Prohibited |
| <i>Etiologic agent, see Infectious substances, etc.</i> | | | | | |
| <i>Explosive articles, see Articles, explosive, n.o.s. etc.</i> | | | | | |
| Explosive, blasting, type A | 1.1D | UN0081 | II | Prohibited | Prohibited |
| Explosive, blasting, type B | 1.1D | UN0082 | II | Prohibited | Prohibited |
| Explosive, blasting, type B or Agent blasting, Type B | 1.5D | UN0331 | II | Prohibited | Prohibited |
| Explosive, blasting, type C | 1.1D | UN0083 | II | Prohibited | Prohibited |
| Explosive, blasting, type D | 1.1D | UN0084 | II | Prohibited | Prohibited |
| Explosive, blasting, type E | 1.1D | UN0241 | II | Prohibited | Prohibited |
| Explosive, blasting, type E or Agent blasting, Type E | 1.5D | UN0332 | II | Prohibited | Prohibited |
| <i>Explosive, forbidden. See 49 CFR 173.54</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Explosive substances, see Substances, explosive, n.o.s. etc.</i> | | | | | |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| <i>Explosives, slurry, see Explosive, blasting, type E</i> | | | | | |
| <i>Explosives, water gels, see Explosive, blasting, type E</i> | | | | | |
| Extracts, aromatic, liquid | 3 | UN1169 | II, III | Prohibited | 3A |
| Extracts, flavoring, liquid | 3 | UN1197 | II, III | Prohibited | 3A |
| F | | | | | |
| <i>Fabric with animal or vegetable oil, see Fibers or Fabrics, etc.</i> | | | | | |
| Ferric arsenate | 6.1 | UN1606 | II | Prohibited | Prohibited |
| Ferric arsenite | 6.1 | UN1607 | II | Prohibited | Prohibited |
| Ferric chloride, anhydrous | 8 | UN1773 | III | 8A | 8A |
| Ferric chloride, solution | 8 | UN2582 | III | 8A | 8A |
| Ferric nitrate | 5.1 | UN1466 | III | 5A | 5A |
| Ferrocium | 4.1 | UN1323 | II | Prohibited | 4A |
| Ferrosilicon, with 30 percent or more but less than 90 percent silicon | 4.3 | UN1408 | III | Prohibited | 4A |
| Ferrous arsenate | 6.1 | UN1608 | II | Prohibited | Prohibited |
| Ferrous chloride, solid | 8 | NA1759 | II | 8A | 8A |
| Ferrous chloride, solution | 8 | NA1760 | II | 8A | 8A |
| Ferrous metal borings or Ferrous metal shavings or Ferrous metal turnings or Ferrous metal cuttings in a form liable to self-heating | 4.2 | UN2793 | III | Prohibited | Prohibited |
| Fertilizer ammoniating solution with free ammonia | 2.2 | UN1043 | n/a | 2B | 2B |
| Fibers, animal or Fibers, vegetable burnt, wet or damp | 4.2 | UN1372 | III | Prohibited | Prohibited |
| Fiber, vegetable, dry | 4.1 | UN3360 | III | Prohibited | Prohibited |
| Fibers or Fabrics impregnated with weakly nitrated nitrocellulose, n.o.s. | 4.1 | UN1353 | III | Prohibited | Prohibited |
| Fibers or Fabrics, animal or vegetable or Synthetic, n.o.s. with animal or vegetable oil | 4.2 | UN1373 | III | Prohibited | Prohibited |
| Films, nitrocellulose base, gelatine coated (except scrap) | 4.1 | UN1324 | III | Prohibited | Prohibited |
| <i>Films, nitrocellulose base, from which gelatine has been removed; film scrap, see Celluloid scrap</i> | | | | | |
| Fire extinguisher charges, corrosive liquid | 8 | UN1774 | II | 8A | 8A |
| <i>Fire extinguisher charges, expelling, explosive, see Cartridges, power device</i> | | | | | |
| Fire extinguishers containing compressed or liquified gas | 2.2 | UN1044 | n/a | 2C | 2C |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|-------------------------|----------------------|-------------------|------------------------------|----------------------------------|
| Firelighters, solid <i>with flammable liquid</i> | 4.1 | UN2623 | III | Prohibited | Prohibited |
| Fireworks | 1.1G | UN0333 | II | Prohibited | Prohibited |
| Fireworks | 1.2G | UN0334 | II | Prohibited | Prohibited |
| Fireworks | 1.3G | UN0335 | II | Prohibited | Prohibited |
| Fireworks | 1.4G | UN0336 | II | Prohibited | Prohibited |
| Fireworks | 1.4S | UN0337 | II | Prohibited | Prohibited |
| First aid kits | 9 | UN3316 | | Prohibited | 9C |
| Fish meal, stabilized or Fish scrap, stabilized | 9 | UN2216 | III | 9C | 9C |
| Fish meal, unstabilized or Fish scrap, unstabilized | 4.2 | UN1374 | II | Prohibited | Prohibited |
| <i>Flammable compressed gas (small receptacles not fitted with a dispersion device, not refillable), see Receptacles, etc.</i> | | | | | |
| <i>Flammable compressed gas, see Compressed or liquified gas, flammable, etc.</i> | | | | | |
| <i>Flammable gas in lighters, see Lighters or lighter refills, cigarettes, containing flammable gas</i> | | | | | |
| Flammable liquid, toxic, corrosive, n.o.s. | 3 | UN3286 | I, II | Prohibited | Prohibited |
| Flammable liquids, corrosive, n.o.s. | 3 | UN2924 | I, II | Prohibited | Prohibited |
| Flammable liquids, corrosive, n.o.s. | 3 | UN2924 | III | Prohibited | 3A |
| Flammable liquids, n.o.s. | 3 | UN1993 | I, II, III | Prohibited | 3A |
| Flammable liquids, toxic, n.o.s. | 3 | UN1992 | I, II | Prohibited | Prohibited |
| Flammable liquids, toxic, n.o.s. | 3 | UN1992 | III | Prohibited | 3A |
| Flammable solid, corrosive, inorganic, n.o.s. | 4.1 | UN3180 | II, III | Prohibited | 4A |
| Flammable solid, inorganic, n.o.s. | 4.1 | UN3178 | II, III | Prohibited | 4A |
| Flammable solid, organic, molten, n.o.s. | 4.1 | UN3176 | II, III | Prohibited | 4A |
| Flammable solid, oxidizing, n.o.s. | 4.1 | UN3097 | II, III | Prohibited | Prohibited |
| Flammable solid, toxic, inorganic, n.o.s. | 4.1 | UN3179 | II, III | Prohibited | 4A |
| Flammable solids, corrosive, organic, n.o.s. | 4.1 | UN2925 | II | Prohibited | Prohibited |
| Flammable solids, corrosive, organic, n.o.s. | 4.1 | UN2925 | III | Prohibited | 4A |
| Flammable solids, organic, n.o.s. | 4.1 | UN1325 | II, III | Prohibited | 4A |
| Flammable solids, toxic, organic, n.o.s. | 4.1 | UN2926 | II | Prohibited | Prohibited |
| Flammable solids, toxic, organic, n.o.s. | 4.1 | UN2926 | III | Prohibited | 4A |
| Flares, aerial | 1.1G | UN0420 | II | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|------------------|---------------|------------|-----------------------|---------------------------|
| Flares, aerial | 1.2G | UN0421 | II | Prohibited | Prohibited |
| Flares, aerial | 1.3G | UN0093 | II | Prohibited | Prohibited |
| Flares, aerial | 1.4G | UN0403 | II | Prohibited | Prohibited |
| Flares, aerial | 1.4S | UN0404 | II | Prohibited | Prohibited |
| <i>Flares, airplane, see</i> Flares, aerial | | | | | |
| <i>Flares, signal, see</i> Cartridges, signal | | | | | |
| Flares, surface | 1.1G | UN0418 | II | Prohibited | Prohibited |
| Flares, surface | 1.2G | UN0419 | II | Prohibited | Prohibited |
| Flares, surface | 1.3G | UN0092 | II | Prohibited | Prohibited |
| <i>Flares, water-activated, see</i> Contrivances, water-activated, etc. | | | | | |
| Flash powder | 1.1G | UN0094 | II | Prohibited | Prohibited |
| Flash powder | 1.3G | UN0305 | II | Prohibited | Prohibited |
| <i>Flue dusts, poisonous, see</i> Arsenical dust | | | | | |
| <i>Fluoric acid, see</i> Hydrofluoric acid, solution, etc. | | | | | |
| Fluorine, compressed | 2.3 | UN1045 | n/a | Prohibited | Prohibited |
| Fluoroacetic acid | 6.1 | UN2642 | I | Prohibited | Prohibited |
| Fluoroanilines | 6.1 | UN2941 | III | 6A | 6A |
| Fluorobenzene | 3 | UN2387 | II | Prohibited | 3A |
| Fluoroboric acid | 8 | UN1775 | II | 8A | 8A |
| Fluorophosphoric acid anhydrous | 8 | UN1776 | II | Prohibited | Prohibited |
| Fluorosilicates, n.o.s. | 6.1 | UN2856 | III | 6A | 6A |
| Fluorosilicic acid | 8 | UN1778 | II | Prohibited | Prohibited |
| Fluorosulfonic acid | 8 | UN1777 | I | Prohibited | Prohibited |
| Fluorotoluenes | 3 | UN2388 | II | Prohibited | 3A |
| <i>Forbidden materials, see 49 CFR 173.21</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Formaldehyde, solutions, <i>with not less than 25 percent formaldehyde</i> | 8 | UN2209 | III | 8A | 8A |
| Formaldehyde, solutions, flammable | 3 | UN1198 | III | Prohibited | 3A |
| Formaldehyde solutions (with not less than 10 percent and less than 25 percent formaldehyde), <i>see</i> Aviation regulated liquids, n.o.s. or Other regulated substances, liquid, n.o.s. | | | | | |
| <i>Formalin, see</i> Formaldehyde, solutions, etc. | | | | | |
| Formic acid <i>with not less than 10 percent but not more than 85 percent acid by mass</i> | 8 | UN3412 | II | Prohibited | Prohibited |
| Formic acid <i>with not less than 5 percent but less than 10 percent acid by mass</i> | 8 | UN3412 | III | 8A | 8A |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|-------------------------|----------------------|-------------------|------------------------------|----------------------------------|
| Formic acid | 8 | UN1779 | II | 8A | 8A |
| Fracturing devices, explosives, without detonators for oil wells | 1.1D | UN0099 | II | Prohibited | Prohibited |
| Fuel, aviation, turbine engine | 3 | UN1863 | I, II, III | Prohibited | 3A |
| Fuel cell cartridges or Fuel cell cartridges contained in equipment or Fuel cell cartridges packed with equipment containing corrosive substances | 8 | UN3477 | | 8A | 8A |
| Fuel cell cartridges or Fuel cell cartridges contained in equipment or Fuel cell cartridges packed with equipment containing flammable liquids | 3 | UN3473 | | Prohibited | 3A |
| Fuel cell cartridges or Fuel cell cartridges contained in equipment or Fuel cell cartridges packed with equipment containing hydrogen in metal hydride | 2.1 | UN3479 | Prohibited | Prohibited | Prohibited |
| Fuel cell cartridges or Fuel cell cartridges contained in equipment or Fuel cell cartridges packed with equipment containing liquified flammable gas | 2.1 | UN3478 | Prohibited | Prohibited | Prohibited |
| Fuel cell cartridges or Fuel cell cartridges contained in equipment or Fuel cell cartridges packed with equipment containing water-reactive substances | 4.3 | UN3476 | Prohibited | Prohibited | Prohibited |
| Fuel oil (No. 1, 2, 4, 5, or 6) | 3 | NA1993 | III | Prohibited | 3A |
| Fuel system components (including fuel control units(FCU), carburetors, fuel lines, fuel pumps) see Dangerous Goods in Apparatus or Dangerous Goods in Machinery | | | | | |
| Fulminate of mercury (dry) | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Fulminate of mercury, wet, see Mercury fulminate, etc. | | | | | |
| Fulminating gold | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Fulminating mercury | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Fulminating platinum | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Fulminating silver | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Fulminic acid | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Fumaryl chloride | 8 | UN1780 | II | 8A | 8A |
| Fumigated lading, see 49 CFR 172.302(g), 173.9, and 176.76(h) | Prohibited | Prohibited | Prohibited | Prohibited | Prohibited |
| Fumigated transport vehicle or freight containers see 49 CFR 173.9 | | | | | |
| Furaldehydes | 6.1 | UN1199 | II | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Furan | 3 | UN2389 | I | Prohibited | Prohibited |
| Furfuryl alcohol | 6.1 | UN2874 | III | 6A | 6A |
| Furfurylamine | 3 | UN2526 | III | Prohibited | 3A |
| Fuse, detonating, <i>metal clad, see</i> Cord, detonating, <i>metal clad</i> | | | | | |
| Fuse, detonating, mild effect, <i>metal clad, see</i> Cord, detonating, mild effect, <i>metal clad</i> | | | | | |
| Fuse, igniter <i>tubular metal clad</i> | 1.4G | UN0103 | II | Prohibited | Prohibited |
| Fuse, non-detonating (<i>instantaneous or quickmatch</i>) | 1.3G | UN0101 | II | Prohibited | Prohibited |
| Fuse, safety | 1.4S | UN0105 | II | Prohibited | 1B |
| Fusee (<i>railway or highway</i>) | 4.1 | NA1325 | II | Prohibited | Prohibited |
| Fusel oil | 3 | UN1201 | II, III | Prohibited | 3A |
| Fuses, tracer, <i>see</i> Tracers for ammunition | | | | | |
| Fuzes, combination, percussion and time, <i>see</i> Fuzes, detonating (UN0257, UN0367); Fuzes, igniting (UN0317, UN0368) | | | | | |
| Fuzes, detonating | 1.1B | UN0106 | II | Prohibited | Prohibited |
| Fuzes, detonating | 1.2B | UN0107 | II | Prohibited | Prohibited |
| Fuzes, detonating | 1.4B | UN0257 | II | Prohibited | Prohibited |
| Fuzes, detonating | 1.4S | UN0367 | II | Prohibited | Prohibited |
| Fuzes, detonating, <i>with protective features</i> | 1.1D | UN0408 | II | Prohibited | Prohibited |
| Fuzes, detonating, <i>with protective features</i> | 1.2D | UN0409 | II | Prohibited | Prohibited |
| Fuzes, detonating, <i>with protective features</i> | 1.4D | UN0410 | II | Prohibited | Prohibited |
| Fuzes, igniting | 1.3G | UN0316 | II | Prohibited | Prohibited |
| Fuzes, igniting | 1.4G | UN0317 | II | Prohibited | Prohibited |
| Fuzes, igniting | 1.4S | UN0368 | II | Prohibited | Prohibited |
| G | | | | | |
| <i>Galactsan trinitrate</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Gallium | 8 | UN2803 | III | Prohibited | Prohibited |
| Gas cartridges (<i>flammable</i>) <i>without a release device, non-refillable</i> | 2.1 | UN2037 | n/a | Prohibited | 2A |
| Gas identification set | 2.3 | NA9035 | n/a | Prohibited | Prohibited |
| Gas oil or Diesel fuel or Heating oil, light | 3 | UN1202 | III | Prohibited | 3A |
| Gas, refrigerated liquid, flammable, n.o.s. (<i>cryogenic liquid</i>) | 2.1 | UN3312 | n/a | Prohibited | Prohibited |
| Gas, refrigerated liquid, n.o.s. (<i>cryogenic liquid</i>) | 2.2 | UN3158 | n/a | Prohibited | Prohibited |
| Gas, refrigerated liquid, oxidizing, n.o.s. (<i>cryogenic liquid</i>) | 2.2 | UN3311 | n/a | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|-------------------------|----------------------|-------------------|------------------------------|----------------------------------|
| Gas sample, nonpressurized, flammable, n.o.s., <i>not refrigerated liquid</i> | 2.1 | UN3167 | n/a | Prohibited | 2A |
| Gas sample, nonpressurized, toxic, flammable, n.o.s., <i>not refrigerated liquid</i> | 2.3 | UN3168 | n/a | Prohibited | Prohibited |
| Gas sample, nonpressurized, toxic, n.o.s., <i>not refrigerated liquid</i> | 2.3 | UN3169 | n/a | Prohibited | Prohibited |
| Gasohol gasoline mixed with ethyl alcohol, with not more than 10 percent alcohol | 3 | NA1203 | II | Prohibited | 3A |
| Gasoline includes gasoline mixed with ethyl alcohol, with not more than 10 percent alcohol | 3 | UN1203 | II | Prohibited | Prohibited |
| Gasoline, casinghead, see Gasoline | | | | | |
| Gelatine, blasting, see Explosive, blasting, type A | | | | | |
| Gelatine dynamites, see Explosive, blasting, type A | | | | | |
| Germane | 2.3 | UN2192 | n/a | Prohibited | Prohibited |
| Glycerol-1,3-dinitrate | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Glycerol gluconate trinitrate | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Glycerol lactate trinitrate | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Glycerol alpha-monochlorohydrin | 6.1 | UN2689 | III | 6A | 6A |
| Glyceryl trinitrate, see Nitroglycerin, etc. | | | | | |
| Glycidaldehyde | 3 | UN2622 | II | Prohibited | 3A |
| Grenades, hand or rifle, with bursting charge | 1.1D | UN0284 | II | Prohibited | Prohibited |
| Grenades, hand or rifle, with bursting charge | 1.1F | UN0292 | II | Prohibited | Prohibited |
| Grenades, hand or rifle, with bursting charge | 1.2D | UN0285 | II | Prohibited | Prohibited |
| Grenades, hand or rifle, with bursting charge | 1.2F | UN0293 | II | Prohibited | Prohibited |
| Grenades, illuminating, see Ammunition, illuminating, etc. | | | | | |
| Grenades, practice, hand or rifle | 1.2G | UN0372 | II | Prohibited | Prohibited |
| Grenades, practice, hand or rifle | 1.3G | UN0318 | II | Prohibited | Prohibited |
| Grenades, practice, hand or rifle | 1.4G | UN0452 | II | Prohibited | Prohibited |
| Grenades, practice, hand or rifle | 1.4S | UN0110 | II | Prohibited | Prohibited |
| Grenades, smoke, see Ammunition, smoke, etc. | | | | | |
| Guanidine nitrate | 5.1 | UN1467 | III | 5A | 5A |
| Guanyl nitrosaminoguanilydene hydrazine (dry) | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|------------------|---------------|------------|-----------------------|---------------------------|
| Guanyl nitrosaminoguanylidene hydrazine, wetted <i>with not less than 30 percent water, by mass</i> | 1.1A | UN0113 | II | Prohibited | Prohibited |
| Guanyl nitrosaminoguanyltetrazene (dry) | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Guanyl nitrosaminoguanyltetrazene, wetted <i>or</i> Tetrazene, wetted <i>with not less than 30 percent water or mixture of alcohol and water, by mass</i> | 1.1A | UN0114 | II | Prohibited | Prohibited |
| Gunpowder, <i>granular or as a meal, see Black powder, etc. (UN0027)</i> | | | | | |
| Gunpowder, compressed <i>or</i> Gunpowder in pellets, <i>see Black powder, etc. (UN0028)</i> | | | | | |
| H | | | | | |
| Hafnium powder, dry | 4.2 | UN2545 | I, II, III | Prohibited | Prohibited |
| Hafnium powder, wetted <i>with not less than 25 percent water (a visible excess of water must be present) (a) mechanically produced, particle size less than 53 microns; (b) chemically produced, particle size less than 840 microns</i> | 4.1 | UN1326 | II | Prohibited | Prohibited |
| Hand signal device, <i>see</i> Signal devices, hand | | | | | |
| Hazardous substances, liquid <i>or</i> solid, <i>n.o.s.</i> , <i>see</i> Environmentally hazardous substances, <i>etc.</i> | | | | | |
| Hazardous waste, liquid, <i>n.o.s.</i> | 9 | NA3082 | III | Prohibited | Prohibited |
| Hazardous waste, solid, <i>n.o.s.</i> | 9 | NA3077 | III | Prohibited | Prohibited |
| Heating oil, light | 3 | UN1202 | III | Prohibited | 3A |
| Helium, compressed | 2.2 | UN1046 | n/a | 2B | 2B |
| Helium, refrigerated liquid (<i>cyrogenic liquid</i>) | 2.2 | UN1963 | n/a | Prohibited | Prohibited |
| Heptafluoropropane <i>or</i> Refrigerant gas R 227 | 2.2 | UN3296 | n/a | 2B | 2B |
| n-Heptaldehyde | 3 | UN3056 | III | Prohibited | 3A |
| Heptanes | 3 | UN1206 | II | Prohibited | 3A |
| n-Heptane | 3 | UN2278 | II | Prohibited | 3A |
| Hexachloroacetone | 6.1 | UN2661 | III | 6A | 6A |
| Hexachlorobenzene | 6.1 | UN2729 | III | 6A | 6A |
| Hexachlorobutadiene | 6.1 | UN2279 | III | 6A | 6A |
| Hexachlorocyclopentadiene | 6.1 | UN2646 | I | Prohibited | Prohibited |
| Hexachlorophene | 6.1 | UN2875 | III | 6A | 6A |
| Hexadecyltrichlorosilane | 8 | UN1781 | II | Prohibited | Prohibited |
| Hexadienes | 3 | UN2458 | II | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Hexaethyl tetraphosphate and compressed gas mixtures | 2.3 | UN1612 | n/a | Prohibited | Prohibited |
| Hexaethyl tetraphosphate, <i>liquid</i> | 6.1 | UN1611 | II | Prohibited | Prohibited |
| Hexaethyl tetraphosphate, <i>solid</i> | 6.1 | UN1611 | II | Prohibited | Prohibited |
| Hexafluoroacetone | 2.3 | UN2420 | n/a | Prohibited | Prohibited |
| Hexafluoroacetone hydrate, liquid | 6.1 | UN2552 | II | Prohibited | Prohibited |
| Hexafluoroacetone hydrate, solid | 6.1 | UN3436 | II | Prohibited | Prohibited |
| Hexafluoroethane, compressed or Refrigerant gas R 116 | 2.2 | UN2193 | n/a | 2B | 2B |
| Hexafluorophosphoric acid | 8 | UN1782 | II | Prohibited | Prohibited |
| Hexafluoropropylene, compressed or Refrigerant gas R 1216 | 2.2 | UN1858 | n/a | 2B | 2B |
| Hexaldehyde | 3 | UN1207 | III | Prohibited | 3A |
| Hexamethylene diisocyanate | 6.1 | UN2281 | II | Prohibited | Prohibited |
| <i>Hexamethylene triperoxide diamine (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Hexamethylenediamine solution | 8 | UN1783 | II | Prohibited | Prohibited |
| Hexamethylenediamine solution | 8 | UN1783 | III | 8A | 8A |
| Hexamethylenediamine, solid | 8 | UN2280 | III | 8A | 8A |
| Hexamethyleneimine | 3 | UN2493 | II | Prohibited | Prohibited |
| Hexamethylenetetramine | 4.1 | UN1328 | III | Prohibited | 4A |
| <i>Hexamethylol benzene hexanitrate</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Hexanes | 3 | UN1208 | II | Prohibited | 3A |
| <i>2,2',4,4',6,6'-Hexanitro-3,3'-dihydroxyazobenzene (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Hexanitroazoxy benzene</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Hexanitrodiphenyl urea</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>N,N'-(hexanitrodiphenyl) ethylene dinitramine (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Hexanitrodiphenylamine or Dipicrylamine or Hexyl | 1.1D | UN0079 | II | Prohibited | Prohibited |
| <i>2,2',3',4,4',6'-Hexanitrodiphenylamine</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>2,3',4,4',6,6'-Hexanitrodiphenylether</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Hexanitroethane</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Hexanitrooxanilide</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Hexanitrostilbene | 1.1D | UN0392 | II | Prohibited | Prohibited |
| <i>Hexanoic acid, see Corrosive liquids, n.o.s.</i> | | | | | |
| Hexanols | 3 | UN2282 | III | Prohibited | 3A |
| 1-Hexene | 3 | UN2370 | II | Prohibited | 3A |
| Hexogen and cyclotetramethylenetetranitramine mixtures, wetted or desensitized see RDX and HMX mixtures, wetted or desensitized etc. | | | | | |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Hexogen and HMX mixtures, wetted or desensitized see RDX and HMX mixtures, wetted or desensitized etc. | | | | | |
| Hexogen and octogen mixtures, wetted or desensitized see RDX and HMX mixtures, wetted or desensitized etc. | | | | | |
| Hexogen, see Cyclotrimethylenetrinitramine, etc. | | | | | |
| Hexolite, or Hexotol dry or wetted with less than 15 percent water, by mass | 1.1D | UN0118 | II | Prohibited | Prohibited |
| Hexotonal | 1.1D | UN0393 | II | Prohibited | Prohibited |
| Hexyl, see Hexanitrodiphenylamine | | | | | |
| Hexyltrichlorosilane | 8 | UN1784 | II | Prohibited | Prohibited |
| High explosives, see individual explosives' entries | | | | | |
| HMX, see Cyclotetramethylenetetranitramine, etc. | | | | | |
| Hydrazine, anhydrous or Hydrazine aqueous solutions with more than 64 percent hydrazine, by mass | 8 | UN2029 | I | Prohibited | Prohibited |
| Hydrazine, aqueous solution with not more than 37 percent hydrazine, by mass | 6.1 | UN3293 | III | 6A | 6A |
| Hydrazine aqueous solution, flammable with more than 37 percent hydrazine, by mass | 8 | UN3484 | I | Prohibited | Prohibited |
| Hydrazine aqueous solution, with more than 37 percent hydrazine, by mass | 8 | UN2030 | II | Prohibited | Prohibited |
| Hydrazine azide | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Hydrazine chlorate | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Hydrazine decarbonic acid diazide | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Hydrazine perchlorate | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Hydrazine selenate | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Hydriodic acid | 8 | UN1787 | II, III | 8A | 8A |
| Hydriodic acid, anhydrous, see Hydrogen iodide, anhydrous | | | | | |
| Hydrobromic acid, with more than 49 percent hydrobromic acid | 8 | UN1788 | II, III | Prohibited | Prohibited |
| Hydrobromic acid, with not more than 49 percent hydrobromic acid | 8 | UN1788 | II, III | 8A | 8A |
| Hydrobromic acid, anhydrous, see Hydrogen bromide, anhydrous | | | | | |
| Hydrocarbon gas mixture, compressed, n.o.s. | 2.1 | UN1964 | n/a | Prohibited | 2A |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|-------------------------|----------------------|-------------------|------------------------------|----------------------------------|
| Hydrocarbon gas mixtures, liquified, n.o.s. | 2.1 | UN1965 | n/a | Prohibited | 2A |
| Hydrocarbons, liquid, n.o.s. | 3 | UN3295 | I, II, III | Prohibited | 3A |
| Hydrochloric acid | 8 | UN1789 | II, III | 8A | 8A |
| <i>Hydrochloric acid, anhydrous, see Hydrogen chloride, anhydrous</i> | | | | | |
| <i>Hydrocyanic acid, anhydrous, see Hydrogen cyanide, etc.</i> | | | | | |
| Hydrocyanic acid, aqueous solutions or Hydrogen cyanide, aqueous solutions <i>with not more than 20 percent hydrogen cyanide</i> | 6.1 | UN1613 | I | Prohibited | Prohibited |
| Hydrocyanic acid, aqueous solutions <i>with less than 5 percent hydrogen cyanide</i> | 6.1 | NA1613 | II | Prohibited | Prohibited |
| <i>Hydrocyanic acid, liquified, see Hydrogen cyanide, etc.</i> | | | | | |
| <i>Hydrocyanic acid (prussic) unstabilized</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Hydrofluoric acid and Sulfuric acid mixtures | 8 | UN1786 | I | Prohibited | Prohibited |
| <i>Hydrofluoric acid, anhydrous, see Hydrogen fluoride, anhydrous</i> | | | | | |
| Hydrofluoric acid, <i>with more than 60 percent strength</i> | 8 | UN1790 | I | Prohibited | Prohibited |
| Hydrofluoric acid, <i>with not more than 60 percent strength</i> | 8 | UN1790 | II | Prohibited | Prohibited |
| <i>Hydrofluoroboric acid, see Fluoroboric acid</i> | | | | | |
| <i>Hydrofluorosilicic acid, see Fluorosilicic acid</i> | | | | | |
| Hydrogen and Methane mixtures, compressed | 2.1 | UN2034 | n/a | Prohibited | 2A |
| Hydrogen bromide, anhydrous | 2.3 | UN1048 | n/a | Prohibited | Prohibited |
| Hydrogen chloride, anhydrous | 2.3 | UN1050 | n/a | Prohibited | Prohibited |
| Hydrogen chloride, refrigerated liquid | 2.3 | UN2186 | n/a | Prohibited | Prohibited |
| Hydrogen, compressed | 2.1 | UN1049 | n/a | Prohibited | 2A |
| Hydrogen, cyanide, solution in alcohol <i>with not more than 45 percent hydrogen cyanide</i> | 6.1 | UN3294 | I | Prohibited | Prohibited |
| Hydrogen cyanide, stabilized <i>with less than 3 percent water</i> | 6.1 | UN1051 | I | Prohibited | Prohibited |
| Hydrogen cyanide, stabilized <i>with less than 3 percent water and absorbed in a porous inert material</i> | 6.1 | UN1614 | I | Prohibited | Prohibited |
| Hydrogen fluoride, anhydrous | 8 | UN1052 | I | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|------------------|---------------|------------|-----------------------|---------------------------|
| Hydrogen in a metal hydride storage system <i>or</i> Hydrogen in a metal hydride storage system contained in equipment <i>or</i> Hydrogen in a metal hydride storage system packed with equipment | 2.1 | UN3468 | n/a | Prohibited | Prohibited |
| Hydrogen iodide, anhydrous | 2.3 | UN2197 | n/a | Prohibited | Prohibited |
| <i>Hydrogen iodide solution, see Hydriodic acid, solution</i> | | | | | |
| Hydrogendifluoride solutions, n.o.s. | 8 | UN3471 | II | Prohibited | Prohibited |
| Hydrogendifluoride solutions, n.o.s. | 8 | UN3471 | III | Prohibited | 8A |
| Hydrogen peroxide and peroxyacetic acid mixtures, stabilized <i>with acids, water, and not more than 5 percent peroxyacetic acid</i> | 5.1 | UN3149 | II | Prohibited | Prohibited |
| Hydrogen peroxide, aqueous solutions <i>with more than 40 percent but not more than 60 percent hydrogen peroxide (stabilized as necessary)</i> | 5.1 | UN2014 | II | Prohibited | Prohibited |
| Hydrogen peroxide, aqueous solutions <i>with not less than 20 percent but not more than 40 percent hydrogen peroxide (stabilized as necessary)</i> | 5.1 | UN2014 | II | Prohibited | Prohibited |
| Hydrogen peroxide, aqueous solutions <i>with not less than 8 percent but less than 20 percent hydrogen peroxide (stabilized as necessary)</i> | 5.1 | UN2984 | III | 5A | 5A |
| Hydrogen peroxide, stabilized <i>or</i> Hydrogen peroxide aqueous solutions, stabilized <i>with more than 60 percent hydrogen peroxide</i> | 5.1 | UN2015 | I | Prohibited | Prohibited |
| Hydrogen, refrigerated liquid (cryogenic liquid) | 2.1 | UN1966 | n/a | Prohibited | Prohibited |
| Hydrogen selenide, anhydrous | 2.3 | UN2202 | n/a | Prohibited | Prohibited |
| <i>Hydrogen sulfate, see Sulfuric acid, etc.</i> | | | | | |
| Hydrogen sulfide | 2.3 | UN1053 | n/a | Prohibited | Prohibited |
| Hydrogendifluorides, n.o.s. <i>solid</i> | 8 | UN1740 | II | Prohibited | Prohibited |
| Hydrogendifluorides, n.o.s. <i>solid</i> | 8 | UN1740 | III | 8A | 8A |
| Hydrogendifluorides, n.o.s. <i>solutions</i> | 8 | UN3471 | II | Prohibited | Prohibited |
| Hydrogendifluorides, n.o.s. <i>solutions</i> | 8 | UN3471 | III | 8A | 8A |
| <i>Hydrosilicofluoric acid, see Fluorosilicic acid</i> | | | | | |
| 1-Hydroxybenzotriazole, anhydrous, <i>dry or wetted with less than 20 percent water, by mass</i> | 1.3C | UN0508 | n/a | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|------------------|---------------|------------|-----------------------|---------------------------|
| 1-Hydroxybenzotriazole, monohydrate | 4.1 | UN3474 | I | Prohibited | Prohibited |
| <i>Hydroxyl amine iodide</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Hydroxylamine sulfate | 8 | UN2865 | III | 8A | 8A |
| Hypochlorite solutions | 8 | UN1791 | II, III | 8A | 8A |
| Hypochlorites, inorganic, n.o.s. | 5.1 | UN3212 | II | 5A | 5A |
| <i>Hyponitrous acid</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| I | | | | | |
| <i>Igniter fuse, metal clad, see Fuse, igniter tubular metal clad</i> | | | | | |
| Igniters | 1.1G | UN0121 | II | Prohibited | Prohibited |
| Igniters | 1.2G | UN0314 | II | Prohibited | Prohibited |
| Igniters | 1.3G | UN0315 | II | Prohibited | Prohibited |
| Igniters | 1.4G | UN0325 | II | Prohibited | Prohibited |
| Igniters | 1.4S | UN0454 | II | Prohibited | 1A |
| 3,3'-Iminodipropylamine | 8 | UN2269 | III | 8A | 8A |
| Infectious substances, affecting animals <i>only</i> | 6.2 | UN2900 | n/a | Prohibited | Prohibited |
| Infectious substances, affecting humans <i>only</i> | 6.2 | UN2814 | n/a | Prohibited | Prohibited |
| Inflammable, see Flammable | | | | | |
| <i>Initiating explosives (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Inosital hexanitrate (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Insecticide gases, n.o.s. | 2.2 | UN1968 | n/a | 2B | 2B |
| Insecticide gases, flammable, n.o.s. | 2.1 | UN3354 | n/a | Prohibited | 2A |
| Insecticide gases, toxic, n.o.s. | 2.3 | UN1967 | n/a | Prohibited | Prohibited |
| Insecticide gases, toxic, flammable, n.o.s., <i>Inhalation hazard A, B, C or D</i> | 2.3 | UN3355 | n/a | Prohibited | Prohibited |
| <i>Inulin trinitrate (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Iodine | 8 | UN3495 | III | Prohibited | Prohibited |
| <i>Iodine azide (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Iodine monochloride, liquid | 8 | UN3498 | II | Prohibited | Prohibited |
| Iodine monochloride, solid | 8 | UN1792 | II | Prohibited | Prohibited |
| Iodine pentafluoride | 5.1 | UN2495 | I | Prohibited | Prohibited |
| 2-Iodobutane | 3 | UN2390 | II | Prohibited | 3A |
| Iodomethylpropanes | 3 | UN2391 | II | Prohibited | 3A |
| Iodopropanes | 3 | UN2392 | III | Prohibited | 3A |
| <i>Iodoxy compounds (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Iridium nitratopentamine iridium nitrate</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Iron chloride, see Ferric chloride, etc.</i> | | | | | |
| Iron oxide, spent, or Iron sponge, spent <i>obtained from coal gas purification</i> | 4.2 | UN1376 | III | Prohibited | Prohibited |
| Iron pentacarbonyl | 6.1 | UN1994 | I | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| <i>Iron sesquichloride, see Ferric chloride</i> | | | | | |
| <i>Irritating material, see Tear gas substances, etc.</i> | | | | | |
| Isobutane <i>see also</i> Petroleum gases, liquified | 2.1 | UN1969 | n/a | Prohibited | 2A |
| Isobutanol or Isobutyl alcohol | 3 | UN1212 | III | Prohibited | 3A |
| Isobutyl acetate | 3 | UN1213 | II | Prohibited | 3A |
| Isobutyl acrylate, stabilized | 3 | UN2527 | III | Prohibited | 3A |
| Isobutyl alcohol, <i>see</i> Isobutanol | | | | | |
| Isobutyl aldehyde, <i>see</i> Isobutyraldehyde | | | | | |
| Isobutyl formate | 3 | UN2393 | II | Prohibited | 3A |
| Isobutyl isobutyrate | 3 | UN2528 | III | Prohibited | 3A |
| Isobutyl isocyanate | 3 | UN2486 | I | Prohibited | Prohibited |
| Isobutyl methacrylate, stabilized | 3 | UN2283 | III | Prohibited | 3A |
| Isobutyl propionate | 3 | UN2394 | III | Prohibited | 3A |
| Isobutylamine | 3 | UN1214 | II | Prohibited | Prohibited |
| Isobutylene <i>see also</i> Petroleum gases, liquified | 2.1 | UN1055 | n/a | Prohibited | 2A |
| Isobutyraldehyde or Isobutyl aldehyde | 3 | UN2045 | II | Prohibited | 3A |
| Isobutyric acid | 3 | UN2529 | III | Prohibited | 3A |
| Isobutyronitrile | 3 | UN2284 | II | Prohibited | Prohibited |
| Isobutyryl chloride | 3 | UN2395 | II | Prohibited | Prohibited |
| Isocyanates, flammable, toxic, n.o.s. or Isocyanate solutions, flammable, toxic, n.o.s. <i>flashpoint less than 23°C</i> | 3 | UN2478 | II | Prohibited | Prohibited |
| Isocyanates, toxic, flammable, n.o.s. or Isocyanate solutions, toxic, flammable, n.o.s. <i>flashpoint not less than 23° C but not more than 61° C and boiling point less than 300° C</i> | 6.1 | UN3080 | II | Prohibited | Prohibited |
| Isocyanates, toxic, n.o.s. or Isocyanate solutions, toxic, n.o.s. <i>flashpoint more than 61° C and boiling point less than 300° C</i> | 6.1 | UN2206 | II | Prohibited | Prohibited |
| Isocyanates, toxic, n.o.s. or Isocyanate solutions, toxic, n.o.s. <i>flashpoint more than 61° C and boiling point less than 300° C</i> | 6.1 | UN2206 | III | 6A | 6A |
| Isocyanatobenzotrifluorides | 6.1 | UN2285 | II | Prohibited | Prohibited |
| Isoheptenes | 3 | UN2287 | II | Prohibited | 3A |
| Isohexenes | 3 | UN2288 | II | Prohibited | 3A |
| <i>Isooctane, see</i> Octanes | | | | | |
| Isooctenes | 3 | UN1216 | II | Prohibited | 3A |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| <i>Isopentane, see Pentanes</i> | | | | | |
| <i>Isopentanoic acid, see Corrosive liquids, n.o.s.</i> | | | | | |
| Isopentenes | 3 | UN2371 | I | Prohibited | 3A |
| Isophorone diisocyanate | 6.1 | UN2290 | III | 6A | 6A |
| Isophoronediamine | 8 | UN2289 | III | 8A | 8A |
| Isoprene, stabilized | 3 | UN1218 | I | Prohibited | 3A |
| Isopropanol or Isopropyl alcohol | 3 | UN1219 | II | Prohibited | 3A |
| Isopropenyl acetate | 3 | UN2403 | II | Prohibited | 3A |
| Isopropenylbenzene | 3 | UN2303 | III | Prohibited | 3A |
| Isopropyl acetate | 3 | UN1220 | II | Prohibited | 3A |
| Isopropyl acid phosphate | 8 | UN1793 | III | 8A | 8A |
| Isopropyl alcohol, <i>see</i> Isopropanol | | | | | |
| Isopropyl butyrate | 3 | UN2405 | III | Prohibited | 3A |
| Isopropyl chloroacetate | 3 | UN2947 | III | Prohibited | 3A |
| Isopropyl chloroformate | 6.1 | UN2407 | I | Prohibited | Prohibited |
| Isopropyl 2-chloropropionate | 3 | UN2934 | III | Prohibited | 3A |
| Isopropyl isobutyrate | 3 | UN2406 | II | Prohibited | 3A |
| Isopropyl isocyanate | 3 | UN2483 | I | Prohibited | 3A |
| <i>Isopropyl mercaptan, see Propanethiols</i> | | | | | |
| Isopropyl nitrate | 3 | UN1222 | II | Prohibited | 3A |
| <i>Isopropyl phosphoric acid, see Isopropyl acid phosphate</i> | | | | | |
| Isopropyl propionate | 3 | UN2409 | II | Prohibited | 3A |
| Isopropylamine | 3 | UN1221 | I | | |
| Isopropylbenzene | 3 | UN1918 | III | Prohibited | 3A |
| <i>Isopropylcumyl hydroperoxide, with more than 72 percent in solution</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Isosorbide dinitrate mixture <i>with not less than 60 percent lactose, mannose, starch or calcium hydrogen phosphate</i> | 4.1 | UN2907 | II | Prohibited | Prohibited |
| Isosorbide5mononitrate | 4.1 | UN3251 | III | Prohibited | 3A |
| <i>Isothiocyanic acid</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| J | | | | | |
| <i>Jet fuel, see Fuel, aviation, turbine engine</i> | | | | | |
| Jet, perforating guns, charged <i>oil well, with detonator</i> | 1.1D | NA0124 | II | Prohibited | Prohibited |
| Jet, perforating guns, charged <i>oil well, with detonator</i> | 1.4D | NA0494 | II | Prohibited | Prohibited |
| Jet, perforating guns, charged <i>oil well, without detonator</i> | 1.1D | UN0124 | II | Prohibited | Prohibited |
| Jet, perforating guns, charged <i>oil well, without detonator</i> | 1.4D | UN0494 | II | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| <i>Jet, perforators, see Charges, shaped, commercial etc.</i> | | | | | |
| <i>Jet tappers, without detonator, see Charges, shaped, commercial, etc.</i> | | | | | |
| <i>Jet thrust igniters, for rocket motors or Jato, see Igniters</i> | | | | | |
| <i>Jet thrust unit (Jato), see Rockets motors</i> | | | | | |
| K | | | | | |
| Kerosene | 3 | UN1223 | III | Prohibited | 3A |
| Ketones, liquid, n.o.s. | 3 | UN1224 | I | Prohibited | Prohibited |
| Ketones, liquid, n.o.s. | 3 | UN1224 | II, III | Prohibited | 3A |
| Krill meal | 4.2 | UN3497 | II, III | Prohibited | 4A |
| Krypton, compressed | 2.2 | UN1056 | n/a | 2B | 2B |
| Krypton, refrigerated liquid (<i>cryogenic liquid</i>) | 2.2 | UN1970 | n/a | Prohibited | Prohibited |
| L | | | | | |
| <i>Lacquer base or lacquer chips, nitrocellulose, dry, see Nitrocellulose, etc. (UN2557)</i> | | | | | |
| <i>Lacquer base or lacquer chips, plastic, wet with alcohol or solvent, see Nitrocellulose (UN2059, UN2555, UN2556, UN2557) or Paint etc. (UN1263)</i> | | | | | |
| Lead acetate | 6.1 | UN1616 | III | 6A | 6A |
| Lead arsenates | 6.1 | UN1617 | II | Prohibited | Prohibited |
| Lead arsenites | 6.1 | UN1618 | II | Prohibited | Prohibited |
| <i>Lead azide (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Lead azide, wetted with not less than 20 percent water or mixture of alcohol and water, by mass</i> | 1.1A | UN0129 | II | Prohibited | Prohibited |
| Lead compounds, soluble, n.o.s. | 6.1 | UN2291 | III | 6A | 6A |
| Lead cyanide | 6.1 | UN1620 | II | Prohibited | Prohibited |
| Lead dioxide | 5.1 | UN1872 | III | 5A | 5A |
| <i>Lead dross, see Lead sulfate with more than 3 percent free acid</i> | | | | | |
| Lead nitrate | 5.1 | UN1469 | II | Prohibited | Prohibited |
| <i>Lead nitroresorcinat (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Lead perchlorate, solid | 5.1 | UN1470 | II | Prohibited | Prohibited |
| Lead perchlorate, solution | 5.1 | UN3408 | II, III | Prohibited | Prohibited |
| <i>Lead peroxide, see Lead dioxide</i> | | | | | |
| Lead phosphite, dibasic | 4.1 | UN2989 | II | Prohibited | Prohibited |
| Lead phosphite, dibasic | 4.1 | UN2989 | III | Prohibited | 4A |
| <i>Lead picrate (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Lead styphnate (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|-------------------------|----------------------|-------------------|------------------------------|----------------------------------|
| Lead styphnate, wetted or Lead trinitroresorcinate, wetted with not less than 20 percent water or mixture of alcohol and water, by mass | 1.1A | UN0130 | II | Prohibited | Prohibited |
| Lead sulfate with more than 3 percent free acid | 8 | UN1794 | II | 8A | 8A |
| Lead trinitroresorcinate, see Lead styphnate, etc. | | | | | |
| Lifesaving appliances, not self-inflating containing dangerous goods as equipment | 9 | UN3072 | n/a | Prohibited | Prohibited |
| Lifesaving appliances, self-inflating | 9 | UN2990 | n/a | Prohibited | Prohibited |
| Lighters, new or empty, purged of all residual fuel and vapors | n/a | | | | |
| Lighter replacement cartridges containing liquified petroleum gases, see Lighter refills containing flammable gas | | | | | |
| Lighters containing flammable gas | 2.1 | UN1057 | n/a | Prohibited | 3C |
| Lighter refills containing flammable gas not exceeding 4 fluid ounces (7.22 cubic inches) and 65 grams of flammable gas | 2.1 | UN1057 | n/a | Prohibited | 3C |
| Lighters, non-pressurized, containing flammable liquid | 3 | NA1057 | II | Prohibited | Prohibited |
| Lighter replacement cartridges containing liquified petroleum gases see Lighter refills containing flammable gas. Etc. | | | | | |
| Lighters, fuse | 1.4S | UN0131 | II | Prohibited | Prohibited |
| Lime, unslaked, see Calcium oxide | | | | | |
| Liquified gas, flammable, n.o.s. | 2.1 | UN3161 | n/a | Prohibited | 2A |
| Liquified gas, n.o.s. | 2.2 | UN3163 | n/a | 2B | 2B |
| Liquified gas, oxidizing, n.o.s. | 2.2 | UN3157 | n/a | 2B | 2B |
| Liquified gas, toxic, corrosive, n.o.s. Inhalation Hazard Zone A, B, C, or D | 2.3 | UN3308 | n/a | Prohibited | Prohibited |
| Liquified gas, toxic, flammable, corrosive, n.o.s. Inhalation Hazard Zone A, B, C, or D | 2.3 | UN3309 | n/a | Prohibited | Prohibited |
| Liquified gas, toxic, flammable, n.o.s. Inhalation Hazard Zone A, B, C, or D | 2.3 | UN3160 | n/a | Prohibited | Prohibited |
| Liquified gas, toxic, n.o.s. Inhalation Hazard Zone A, B, C, or D | 2.3 | UN3162 | n/a | Prohibited | Prohibited |
| Liquified gas, toxic, oxidizing, corrosive, n.o.s. Inhalation Hazard Zone A, B, C, or D | 2.3 | UN3310 | n/a | Prohibited | Prohibited |
| Liquified gas, toxic, oxidizing, n.o.s. Inhalation Hazard Zone A, B, C, or D | 2.3 | UN3307 | n/a | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|------------------|---------------|------------|-----------------------|---------------------------|
| Liquified gases, <i>nonflammable charged with nitrogen, carbon dioxide, or air</i> | 2.2 | UN1058 | n/a | 2B | 2B |
| <i>Liquified hydrocarbon gas, see Hydrocarbon gas mixtures, liquified, n.o.s., etc.</i> | | | | | |
| <i>Liquified natural gas, see Methane, etc. (UN1972)</i> | | | | | |
| Liquified petroleum gas, <i>see Petroleum gases, liquified</i> | | | | | |
| Lithium | 4.3 | UN1415 | I | Prohibited | 4A |
| <i>Lithium acetylide ethylenediamine complex, see Water reactive solid etc.</i> | | | | | |
| Lithium aluminum hydride | 4.3 | UN1410 | I | Prohibited | Prohibited |
| Lithium aluminum hydride, ethereal | 4.3 | UN1411 | I | Prohibited | Prohibited |
| Lithium borohydride | 4.3 | UN1413 | I | Prohibited | Prohibited |
| Lithium ferrosilicon | 4.3 | UN2830 | II | Prohibited | 4A |
| Lithium hydride | 4.3 | UN1414 | I | Prohibited | 4A |
| Lithium hydride, fused solid | 4.3 | UN2805 | II | Prohibited | 4A |
| Lithium hydroxide, monohydrate <i>or</i> Lithium hydroxide, solid | 8 | UN2680 | II | 8A | 8A |
| Lithium hydroxide, solution | 8 | UN2679 | II, III | 8A | 8A |
| Lithium hypochlorite, dry <i>or</i> Lithium hypochlorite mixtures, dry | 5.1 | UN1471 | II | 5A | 5A |
| Lithium-ion batteries (including lithium polymer batteries) | 9 | UN3480 | N/A | Prohibited | 9D |
| Lithium-ion batteries (including lithium polymer batteries) contained in equipment | 9 | UN3481 | N/A | 9D | 9D |
| Lithium-ion batteries (including lithium polymer batteries) packed with equipment | 9 | UN3481 | N/A | 9D | 9D |
| Lithium metal batteries (including lithium alloy batteries) | 9 | UN3090 | N/A | Prohibited | 9D |
| Lithium metal batteries (including lithium alloy batteries) contained in equipment | 9 | UN3091 | N/A | 9D | 9D |
| Lithium metal batteries (including lithium alloy batteries) packed with equipment | 9 | UN3091 | N/A | 9D | 9D |
| Lithium peroxide | 5.1 | UN1472 | II | 5A | 5A |
| Lithium silicon | 4.3 | UN1417 | II | Prohibited | 5A |
| <i>LNG, see Methane etc. (UN1972)</i> | | | | | |
| London purple | 6.1 | UN1621 | II | 6A | 6A |
| <i>LPG, see Petroleum gases, liquified</i> | | | | | |
| <i>Lye, see Sodium hydroxide solutions</i> | | | | | |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| M | | | | | |
| Magnesium or Magnesium alloys with more than 50 percent magnesium in pellets, turnings, or ribbons | 4.1 | UN1869 | III | Prohibited | 4A |
| Magnesium aluminum phosphide | 4.3 | UN1419 | I | Prohibited | Prohibited |
| Magnesium arsenate | 6.1 | UN1622 | II | Prohibited | Prohibited |
| <i>Magnesium bisulfite solution, see Bisulfites, aqueous solutions, n.o.s.</i> | | | | | |
| Magnesium bromate | 5.1 | UN1473 | II | 5A | 5A |
| Magnesium chlorate | 5.1 | UN2723 | II | 5A | 5A |
| Magnesium diamide | 4.2 | UN2004 | II | Prohibited | Prohibited |
| <i>Magnesium dross, wet or hot</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Magnesium fluorosilicate | 6.1 | UN2853 | III | 6A | 6A |
| Magnesium granules, coated particle size not less than 149 microns | 4.3 | UN2950 | III | Prohibited | Prohibited |
| Magnesium hydride | 4.3 | UN2010 | I | Prohibited | Prohibited |
| Magnesium nitrate | 5.1 | UN1474 | III | 5A | 5A |
| Magnesium perchlorate | 5.1 | UN1475 | II | 5A | 5A |
| Magnesium peroxide | 5.1 | UN1476 | II | 5A | 5A |
| Magnesium phosphide | 4.3 | UN2011 | I | Prohibited | Prohibited |
| Magnesium, powder or Magnesium alloys, powder | 4.3 | UN1418 | I | Prohibited | Prohibited |
| Magnesium, powder or Magnesium alloys, powder | 4.3 | UN1418 | II, III | Prohibited | Prohibited |
| <i>Magnesium scrap, see Magnesium etc. (UN1869)</i> | | | | | |
| Magnesium silicide | 4.3 | UN2624 | II | Prohibited | Prohibited |
| Maleic anhydride | 8 | UN2215 | III | 8A | 8A |
| Maleic anhydride, molten | 8 | UN2215 | III | Prohibited | Prohibited |
| Malononitrile | 6.1 | UN2647 | II | Prohibited | Prohibited |
| <i>Mancozeb (manganese ethylenedisithiocarbamate complex with zinc) see Maneb etc.</i> | | | | | |
| Maneb or Maneb preparations with not less than 60 percent maneb | 4.2 | UN2210 | III | Prohibited | Prohibited |
| Maneb stabilized or Maneb preparations, stabilized against self-heating | 4.3 | UN2968 | III | Prohibited | Prohibited |
| Manganese nitrate | 5.1 | UN2724 | III | 5A | 5A |
| Manganese resinate | 4.1 | UN1330 | III | Prohibited | 4A |
| <i>Mannitan tetranitrate</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Mannitol hexanitrate (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Mannitol hexanitrate, wetted or Nitromannite, wetted with not less than 40 percent water, or mixture of alcohol and water, by mass | 1.1D | UN0133 | II | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|------------------|---------------|------------|-----------------------|---------------------------|
| <i>Marine pollutants, liquid or solid, n.o.s., see Environmentally hazardous substances, liquid or solid, n.o.s.</i> | | | | | |
| <i>Matches, block, see Matches, strike anywhere</i> | | | | | |
| Matches, fusee | 4.1 | UN2254 | III | Prohibited | Prohibited |
| Matches, safety (<i>book, card, or strike on box</i>) | 4.1 | UN1944 | III | Prohibited | 4B |
| Matches, strike anywhere | 4.1 | UN1331 | III | Prohibited | Prohibited |
| Matches, wax, Vesta | 4.1 | UN1945 | III | Prohibited | Prohibited |
| <i>Matting acid, see Sulfuric acid etc.</i> | | | | | |
| Medicine, liquid, flammable, toxic, n.o.s. | 3 | UN3248 | II | Prohibited | Prohibited |
| Medicine, liquid, flammable, toxic, n.o.s. | 3 | UN3248 | III | Prohibited | 3A |
| Medicine, liquid, toxic, n.o.s. | 6.1 | UN1851 | II, III | 6A | 6A |
| Medicine, solid, toxic, n.o.s. | 6.1 | UN3249 | II, III | 6A | 6A |
| <i>Memtetrahydrophthalic anhydride, see Corrosive liquids, n.o.s.</i> | | | | | |
| Mercaptans, liquid, flammable, n.o.s. or Mercaptan mixture, liquid, flammable, n.o.s. | 3 | UN3336 | I, II, III | Prohibited | 3A |
| Mercaptans, liquid, flammable, toxic, n.o.s. or Mercaptan mixtures, liquid, flammable, toxic, n.o.s. | 3 | UN1228 | II | Prohibited | Prohibited |
| Mercaptans, liquid, flammable, toxic, n.o.s. or Mercaptan mixtures, liquid, flammable, toxic, n.o.s. | 3 | UN1228 | III | Prohibited | 3A |
| Mercaptans, liquid, toxic, flammable, n.o.s. or Mercaptan mixtures, liquid, toxic, flammable, n.o.s., <i>flashpoint not less than 23° C</i> | 6.1 | UN3071 | II | Prohibited | Prohibited |
| 5-Mercaptotetrazol-1-acetic acid | 1.4C | UN0448 | II | Prohibited | Prohibited |
| Mercuric arsenate | 6.1 | UN1623 | II | Prohibited | Prohibited |
| Mercuric chloride | 6.1 | UN1624 | II | Prohibited | Prohibited |
| <i>Mercuric compounds, see Mercury compounds, etc.</i> | | | | | |
| Mercuric nitrate | 6.1 | UN1625 | II | Prohibited | Prohibited |
| Mercuric potassium cyanide | 6.1 | UN1626 | I | Prohibited | Prohibited |
| <i>Mercuric sulfocyanate, see Mercury thiocyanate</i> | | | | | |
| <i>Mercurool, see Mercury nucleate</i> | | | | | |
| <i>Mercurous azide</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Mercurous compounds, see Mercury compounds, etc.</i> | | | | | |
| Mercurous nitrate | 6.1 | UN1627 | II | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|------------------|---------------|------------|-----------------------|---------------------------|
| Mercury | 8 | UN2809 | III | Prohibited | Prohibited |
| Mercury acetate | 6.1 | UN1629 | II | Prohibited | Prohibited |
| <i>Mercury acetylide</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Mercury ammonium chloride | 6.1 | UN1630 | II | Prohibited | Prohibited |
| Mercury based pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i> | 3 | UN2778 | I, II | Prohibited | Prohibited |
| Mercury based pesticides, liquid, toxic | 6.1 | UN3012 | I, II | Prohibited | Prohibited |
| Mercury based pesticides, liquid, toxic | 6.1 | UN3012 | III | 6A | 6A |
| Mercury based pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i> | 6.1 | UN3011 | I, II | Prohibited | Prohibited |
| Mercury based pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i> | 6.1 | UN3011 | III | 6A | 6A |
| Mercury based pesticides, solid, toxic | 6.1 | UN2777 | I, II | Prohibited | Prohibited |
| Mercury based pesticides, solid, toxic | 6.1 | UN2777 | III | 6A | 6A |
| Mercury benzoate | 6.1 | UN1631 | II | Prohibited | Prohibited |
| Mercury bromides | 6.1 | UN1634 | II | Prohibited | Prohibited |
| Mercury compounds, liquid, n.o.s. | 6.1 | UN2024 | I, II | Prohibited | Prohibited |
| Mercury compounds, liquid, n.o.s. | 6.1 | UN2024 | III | 6A | 6A |
| Mercury compounds, solid, n.o.s. | 6.1 | UN2025 | I, II | Prohibited | Prohibited |
| Mercury compounds, solid, n.o.s. | 6.1 | UN2025 | III | 6A | 6A |
| Mercury contained in manufactured articles | 8 | UN3506 | III | 8C | 8C |
| Mercury cyanide | 6.1 | UN1636 | II | Prohibited | Prohibited |
| Mercury fulminate, wetted with not less than 20 percent water, or mixture of alcohol and water, by mass | 1.1A | UN0135 | II | Prohibited | Prohibited |
| Mercury gluconate | 6.1 | UN1637 | II | Prohibited | Prohibited |
| <i>Mercury iodide aquabasic ammonobasic (Iodide of Millon's base)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Mercury iodide | 6.1 | UN1638 | II | Prohibited | Prohibited |
| <i>Mercury nitride</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Mercury nucleate | 6.1 | UN1639 | II | Prohibited | Prohibited |
| Mercury oleate | 6.1 | UN1640 | II | Prohibited | Prohibited |
| Mercury oxide | 6.1 | UN1641 | II | Prohibited | Prohibited |
| Mercury oxycyanide, desensitized | 6.1 | UN1642 | II | Prohibited | Prohibited |
| <i>Mercury oxycyanide</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Mercury potassium iodide | 6.1 | UN1643 | II | Prohibited | Prohibited |
| Mercury salicylate | 6.1 | UN1644 | II | Prohibited | Prohibited |
| Mercury sulfates | 6.1 | UN1645 | II | Prohibited | Prohibited |
| Mercury thiocyanate | 6.1 | UN1646 | II | Prohibited | Prohibited |
| Mesityl oxide | 3 | UN1229 | III | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Metal carbonyls, liquid, n.o.s. | 6.1 | UN3281 | I, II | Prohibited | Prohibited |
| Metal carbonyls, liquid, n.o.s. | 6.1 | UN3281 | III | 6A | 6A |
| Metal carbonyls, solid, n.o.s. | 6.1 | UN3466 | I, II | Prohibited | Prohibited |
| Metal carbonyls, solid, n.o.s. | 6.1 | UN3466 | III | 6A | 6A |
| Metal catalyst, dry | 4.2 | UN2881 | I, II | Prohibited | Prohibited |
| Metal catalyst, dry | 4.2 | UN2881 | III | Prohibited | 4A |
| Metal catalyst, wetted <i>with a visible excess of liquid</i> | 4.2 | UN1378 | II | Prohibited | Prohibited |
| Metal hydrides, flammable, n.o.s. | 4.1 | UN3182 | II, III | Prohibited | 3A |
| Metal hydrides, water reactive, n.o.s. | 4.3 | UN1409 | I | Prohibited | Prohibited |
| Metal hydrides, water reactive, n.o.s. | 4.3 | UN1409 | II | Prohibited | Prohibited |
| Metal powder, self-heating, n.o.s. | 4.2 | UN3189 | II, III | Prohibited | Prohibited |
| Metal powders, flammable, n.o.s. | 4.1 | UN3089 | II, III | Prohibited | 4A |
| <i>Metal salts of methyl nitramine (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Metal salts of organic compounds, flammable, n.o.s. | 4.1 | UN3181 | II, III | Prohibited | 4A |
| Metalddehyde | 4.1 | UN1332 | III | Prohibited | 4A |
| Metallic substances, water reactive, n.o.s. | 4.3 | UN3208 | I, II, III | Prohibited | Prohibited |
| Metallic substance, water reactive, self-heating, n.o.s. | 4.3 | UN3209 | I, II, III | Prohibited | Prohibited |
| Methacrylaldehyde, inhibited | 3 | UN2396 | II | Prohibited | Prohibited |
| Methacrylic acid, inhibited | 8 | UN2531 | III | 8A | 8A |
| Methacrylonitrile, inhibited | 3 | UN3079 | I | Prohibited | Prohibited |
| Methallyl alcohol | 3 | UN2614 | III | Prohibited | 3A |
| <i>Methane and hydrogen, mixtures, see Hydrogen and methane, mixtures etc.</i> | | | | | |
| Methane, compressed or Natural gas, compressed (<i>with high methane content</i>) | 2.1 | UN1971 | n/a | Prohibited | 2A |
| Methane, refrigerated liquid (<i>cryogenic liquid</i>) or Natural gas, refrigerated liquid (<i>cryogenic liquid</i>), <i>with high methane content</i> | 2.1 | UN1972 | n/a | Prohibited | 2A |
| Methanesulfonyl chloride | 6.1 | UN3246 | I | Prohibited | Prohibited |
| Methanol | 3 | UN1230 | II | Prohibited | 3A |
| <i>Methazoic acid</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| 4-Methoxy-4-methylpentan-2-one | 3 | UN2293 | III | Prohibited | 3A |
| 1-Methoxy-2-propanol | 3 | UN3092 | III | Prohibited | 3A |
| Methoxymethyl isocyanate | 6.1 | UN2605 | I | Prohibited | Prohibited |
| Methyl-2-chloropropionate | 3 | UN2933 | III | Prohibited | 3A |
| Methyl acetate | 3 | UN1231 | II | Prohibited | 3A |
| Methyl acetylene and propadiene mixtures, stabilized | 2.1 | UN1060 | n/a | Prohibited | 2A |
| Methyl acrylate, stabilized | 3 | UN1919 | II | Prohibited | 3A |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|-------------------------|----------------------|-------------------|------------------------------|----------------------------------|
| <i>Methyl alcohol, see Methanol</i> | | | | | |
| Methyl allyl chloride | 3 | UN2554 | II | Prohibited | 3A |
| <i>Methyl amyl ketone, see Amyl methyl ketone</i> | | | | | |
| Methyl bromide | 2.3 | UN1062 | n/a | Prohibited | Prohibited |
| <i>Methyl bromide and chloropicrin mixtures with more than 2 percent chloropicrin, see Chloropicrin and methyl bromide mixtures</i> | | | | | |
| <i>Methyl bromide and chloropicrin mixtures with not more than 2 percent chloropicrin, see Methyl bromide</i> | | | | | |
| Methyl bromide and ethylene dibromide mixtures, liquid | 6.1 | UN1647 | I | Prohibited | Prohibited |
| Methyl bromoacetate | 6.1 | UN2643 | II | Prohibited | Prohibited |
| 2-Methyl-1-butene | 3 | UN2459 | I | Prohibited | Prohibited |
| 2-Methyl-2-butene | 3 | UN2460 | II | Prohibited | Prohibited |
| 3-Methyl-1-butene | 3 | UN2561 | I | Prohibited | Prohibited |
| Methyl tertbutyl ether | 3 | UN2398 | II | Prohibited | 3A |
| Methyl butyrate | 3 | UN1237 | II | Prohibited | 3A |
| Methyl chloride, or Refrigerant gas R 40 | 2.1 | UN1063 | | Prohibited | 2A |
| <i>Methyl chloride and chloropicrin mixtures, see Chloropicrin and methyl chloride mixtures</i> | | | | | |
| Methyl chloride and methylene chloride mixtures | 2.1 | UN1912 | n/a | Prohibited | 2A |
| Methyl chloroacetate | 6.1 | UN2295 | I | Prohibited | Prohibited |
| <i>Methyl chlorocarbonate, see Methyl chloroformate</i> | | | | | |
| <i>Methyl chloroform, see 1,1,1-Trichloroethane</i> | | | | | |
| Methyl chloroformate | 6.1 | UN1238 | I | Prohibited | Prohibited |
| Methyl chloromethyl ether | 6.1 | UN1239 | I | Prohibited | Prohibited |
| Methyl dichloroacetate | 6.1 | UN2299 | III | 6A | 6A |
| <i>Methyl ethyl ether, see Ethyl methyl ether</i> | | | | | |
| <i>Methyl ethyl ketone peroxide, in solution with more than 9 percent by mass active oxygen</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| 2-Methyl-5-ethylpyridine | 6.1 | UN2300 | III | 6A | 6A |
| Methyl ethyl ketone, see Ethyl methyl ketone | | | | | |
| Methyl fluoride, or Refrigerant gas R 41 | 2.1 | UN2454 | n/a | Prohibited | 2A |
| Methyl formate | 3 | UN1243 | I | Prohibited | 3A |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| 2-Methyl-2-heptanethiol | 6.1 | UN3023 | I | Prohibited | Prohibited |
| Methyl iodide | 6.1 | UN2644 | I | Prohibited | Prohibited |
| Methyl isobutyl carbinol | 3 | UN2053 | III | Prohibited | 3A |
| Methyl isobutyl ketone | 3 | UN1245 | II | Prohibited | 3A |
| <i>Methyl isobutyl ketone peroxide, in solution with more than 9 percent by mass active oxygen</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Methyl isocyanate | 6.1 | UN2480 | I | Prohibited | Prohibited |
| Methyl isopropenyl ketone, inhibited | 3 | UN1246 | II | Prohibited | 3A |
| Methyl isothiocyanate | 6.1 | UN2477 | I | Prohibited | Prohibited |
| Methyl isovalerate | 3 | UN2400 | II | Prohibited | 3A |
| Methyl magnesium bromide, in ethyl ether | 4.3 | UN1928 | I | Prohibited | Prohibited |
| Methyl mercaptan | 2.3 | UN1064 | n/a | Prohibited | Prohibited |
| <i>Methyl mercaptopropionaldehyde, see 4-Thiapentanal</i> | | | | | |
| Methyl methacrylate monomer, stabilized | 3 | UN1247 | II | Prohibited | 3A |
| <i>Methyl nitramine (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Methyl nitrate</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Methyl nitrite</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Methyl norbornene dicarboxylic anhydride, see Corrosive liquids, n.o.s.</i> | | | | | |
| Methyl orthosilicate | 6.1 | UN2606 | I | Prohibited | Prohibited |
| Methyl phosphonic dichloride | 6.1 | NA9206 | I | Prohibited | Prohibited |
| <i>Methyl phosphonothioic dichloride, anhydrous, see Corrosive liquids, n.o.s.</i> | | | | | |
| Methyl phosphonous dichloride, pyrophoric liquid | 6.1 | NA2845 | I | Prohibited | Prohibited |
| <i>Methyl picric acid (heavy metal salts of)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Methyl propionate | 3 | UN1248 | II | Prohibited | 3A |
| Methyl propyl ether | 3 | UN2612 | II | Prohibited | 3A |
| Methyl propyl ketone | 3 | UN1249 | II | Prohibited | 3A |
| <i>Methyl sulfate, see Dimethyl sulfate</i> | | | | | |
| <i>Methyl sulfide, see Dimethyl sulfide</i> | | | | | |
| Methyl trichloroacetate | 6.1 | UN2533 | III | 6A | 6A |
| <i>Methyl trimethylol methane trinitrate</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Methyl vinyl ketone, stabilized | 6.1 | UN1251 | I | Prohibited | Prohibited |
| Methylal | 3 | UN1234 | II | Prohibited | Prohibited |
| Methylamine, anhydrous | 2.1 | UN1061 | n/a | Prohibited | 2A |
| Methylamine, aqueous solution | 3 | UN1235 | II | Prohibited | 3A |
| <i>Methylamine dinitramine and dry salts thereof</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| <i>Methylamine nitroform</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Methylamine perchlorate (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Methylamyl acetate | 3 | UN1233 | III | Prohibited | 3A |
| N-Methylaniline | 6.1 | UN2294 | III | 6A | 6A |
| alpha-Methylbenzyl alcohol, solid | 6.1 | UN3438 | III | 6A | 6A |
| alpha-Methylbenzyl alcohol, liquid | 6.1 | UN2937 | III | 6A | 6A |
| 3-Methylbutan-2-one | 3 | UN2397 | II | Prohibited | 3A |
| N-Methylbutylamine | 3 | UN2945 | II | Prohibited | Prohibited |
| Methylchlorosilane | 2.3 | UN2534 | n/a | Prohibited | Prohibited |
| Methylcyclohexane | 3 | UN2296 | II | Prohibited | 3A |
| Methylcyclohexanols, <i>flammable</i> | 3 | UN2617 | III | Prohibited | 3A |
| Methylcyclohexanone | 3 | UN2297 | III | Prohibited | 3A |
| Methylcyclopentane | 3 | UN2298 | II | Prohibited | 3A |
| Methyldichloroarsine | 6.1 | NA1556 | I | Prohibited | Prohibited |
| Methyldichlorosilane | 4.3 | UN1242 | I | Prohibited | Prohibited |
| <i>Methylene chloride, see Dichloromethane</i> | | | | | |
| <i>Methylene glycol dinitrate</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| 2-Methylfuran | 3 | UN2301 | II | Prohibited | 3A |
| <i>a-Methylglucoside tetranitrate</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>a-Methylglycerol trinitrate</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| 5-Methylhexan-2-one | 3 | UN2302 | III | Prohibited | 3A |
| Methylhydrazine | 6.1 | UN1244 | I | Prohibited | Prohibited |
| 4-Methylmorpholine or n-methylmorpholine | 3 | UN2535 | II | Prohibited | Prohibited |
| Methylpentadienes | 3 | UN2461 | II | Prohibited | 3A |
| 2-Methylpentan-2-ol | 3 | UN2560 | III | Prohibited | 3A |
| <i>Methylpentanes, see Hexanes</i> | | | | | |
| Methylphenyldichlorosilane | 8 | UN2437 | II | 8A | 8A |
| 1-Methylpiperidine | 3 | UN2399 | II | Prohibited | Prohibited |
| Methyltetrahydrofuran | 3 | UN2536 | II | Prohibited | 3A |
| Methyltrichlorosilane | 3 | UN1250 | I | Prohibited | Prohibited |
| alpha-Methylvaleraldehyde | 3 | UN2367 | II | Prohibited | 3A |
| <i>Mine rescue equipment containing carbon dioxide, see Carbon dioxide</i> | | | | | |
| <i>Mines with bursting charge</i> | 1.1D | UN0137 | II | Prohibited | Prohibited |
| <i>Mines with bursting charge</i> | 1.1F | UN0136 | II | Prohibited | Prohibited |
| <i>Mines with bursting charge</i> | 1.2D | UN0138 | II | Prohibited | Prohibited |
| <i>Mines with bursting charge</i> | 1.2F | UN0294 | II | Prohibited | Prohibited |
| <i>Mixed acid, see Nitrating acid, mixtures etc.</i> | | | | | |
| <i>Mobility aids, see Battery powered equipment or Battery powered vehicle</i> | | | | | |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|-------------------------|----------------------|-------------------|------------------------------|----------------------------------|
| Model rocket motor | 1.4C | NA0276 | II | Prohibited | Prohibited |
| Model rocket motor | 1.4S | NA0323 | II | Prohibited | 1A |
| Molybdenum pentachloride | 8 | UN2508 | III | 8A | 8A |
| <i>Monochloroacetone (unstabilized)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Monochloroethylene, see Vinyl chloride, stabilized</i> | | | | | |
| <i>Monoethanolamine, see Ethanolamine solutions</i> | | | | | |
| <i>Monoethylamine, see Ethylamine</i> | | | | | |
| Morpholine | 3 | UN2054 | III | Prohibited | 3A |
| <i>Morpholine, aqueous, mixture, see Corrosive liquids, n.o.s.</i> | | | | | |
| <i>Motor fuel anti-knock compounds, see Motor fuel anti-knock mixtures</i> | | | | | |
| Motor fuel anti-knock mixture, flammable | 6.1 | UN3483 | I | Prohibited | Prohibited |
| Motor fuel anti-knock mixtures | 6.1 | UN1649 | I | Prohibited | Prohibited |
| Motor spirit, <i>see Gasoline</i> | | | | | |
| <i>Muriatic acid, see Hydrochloric acid solution</i> | | | | | |
| Musk xylene, <i>see 5-tert-Butyl-2,4,6-trinitro-m-xylene</i> | | | | | |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| N | | | | | |
| <i>Naphtha</i> see Petroleum distillates n.o.s. | | | | | |
| Naphthalene, crude or Naphthalene, refined | 4.1 | UN1334 | III | Prohibited | 4A |
| <i>Naphthalene diozonide</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Naphthalene, molten | 4.1 | UN2304 | III | Prohibited | 4A |
| Alpha-Naphthylamine | 6.1 | UN2077 | III | 6A | 6A |
| Beta-Naphthylamine, solid | 6.1 | UN1650 | II | Prohibited | Prohibited |
| Beta-Naphthylamine, solution | 6.1 | UN3411 | II, III | Prohibited | Prohibited |
| <i>Naphthylamineperchlorate</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Naphthylthiourea | 6.1 | UN1651 | II | Prohibited | Prohibited |
| Naphthylurea | 6.1 | UN1652 | II | Prohibited | Prohibited |
| <i>Natural gases (with high methane content), see Methane, etc. (UN1971, UN1972)</i> | | | | | |
| <i>Neohexane, see Hexanes</i> | | | | | |
| Neon, compressed | 2.2 | UN1065 | n/a | 2B | 2B |
| Neon, refrigerated liquid (<i>cryogenic liquid</i>) | 2.2 | UN1913 | n/a | Prohibited | Prohibited |
| <i>New explosive or explosive device, see 49 CFR 173.51 and 173.56</i> | Prohibited | Prohibited | Prohibited | Prohibited | Prohibited |
| Nickel carbonyl | 6.1 | UN1259 | I | Prohibited | Prohibited |
| Nickel cyanide | 6.1 | UN1653 | II | Prohibited | Prohibited |
| Nickel nitrate | 5.1 | UN2725 | III | 5A | 5A |
| Nickel nitrite | 5.1 | UN2726 | III | 5A | 5A |
| <i>Nickel picrate</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Nicotine | 6.1 | UN1654 | II | Prohibited | Prohibited |
| Nicotine compounds, liquid, n.o.s. or Nicotine preparations, liquid, n.o.s. | 6.1 | UN3144 | I, II | Prohibited | Prohibited |
| Nicotine compounds, liquid, n.o.s. or Nicotine preparations, liquid, n.o.s. | 6.1 | UN3144 | III | 6A | 6A |
| Nicotine compounds, solid, n.o.s. or Nicotine preparations, solid, n.o.s. | 6.1 | UN1655 | I, II | Prohibited | Prohibited |
| Nicotine compounds, solid, n.o.s. or Nicotine preparations, solid, n.o.s. | 6.1 | UN1655 | III | 6A | 6A |
| Nicotine hydrochloride liquid or solution | 6.1 | UN1656 | II | Prohibited | Prohibited |
| Nicotine hydrochloride, solid | 6.1 | UN3444 | II | Prohibited | Prohibited |
| Nicotine salicylate | 6.1 | UN1657 | II | Prohibited | Prohibited |
| Nicotine sulfate, <i>solid</i> | 6.1 | UN3445 | II | Prohibited | Prohibited |
| Nicotine sulfate, <i>solution</i> | 6.1 | UN1658 | II | Prohibited | Prohibited |
| Nicotine tartrate | 6.1 | UN1659 | II | Prohibited | Prohibited |
| <i>Nitrated paper (unstable)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Nitrates of diazonium compounds</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Nitrates, inorganic, aqueous solution, n.o.s. | 5.1 | UN3218 | II, III | 5A | 5A |
| Nitrates, inorganic, n.o.s. | 5.1 | UN1477 | II, III | 5A | 5A |
| Nitrating acid mixtures, with more than 50 percent nitric acid | 8 | UN1796 | I | Prohibited | Prohibited |
| Nitrating acid mixtures, with not more than 50 percent nitric acid | 8 | UN1796 | II | Prohibited | Prohibited |
| Nitrating acid mixtures, spent with more than 50 percent nitric acid | 8 | UN1826 | I | Prohibited | Prohibited |
| Nitrating acid mixtures, spent with not more than 50 percent nitric acid | 8 | UN1826 | II | Prohibited | Prohibited |
| Nitric acid other than red fuming, with more than 70 percent nitric acid | 8 | UN2031 | I | Prohibited | Prohibited |
| Nitric acid other than red fuming, with not more than 70 percent nitric acid | 8 | UN2031 | II | Prohibited | Prohibited |
| Nitric acid, red fuming | 8 | UN2032 | I | Prohibited | Prohibited |
| Nitric oxide, compressed | 2.3 | UN1660 | n/a | Prohibited | Prohibited |
| Nitric oxide and dinitrogen tetroxide mixtures or Nitric oxide and nitrogen dioxide mixtures | 2.3 | UN1975 | n/a | Prohibited | Prohibited |
| Nitriles, flammable, toxic, n.o.s. | 3 | UN3273 | I, II | Prohibited | Prohibited |
| Nitriles, toxic, flammable, n.o.s. | 6.1 | UN3275 | I, II | Prohibited | Prohibited |
| Nitriles, toxic, liquid, n.o.s. | 6.1 | UN3276 | I, II | Prohibited | Prohibited |
| Nitriles, toxic, liquid, n.o.s. | 6.1 | UN3276 | III | 6A | 6A |
| Nitriles, toxic, solid, n.o.s. | 6.1 | UN3439 | I, II, | Prohibited | Prohibited |
| Nitriles, toxic, solid, n.o.s. | 6.1 | UN3439 | III | 6A | 6A |
| Nitrites, inorganic, aqueous solution, n.o.s. | 5.1 | UN3219 | II, III | 5A | 5A |
| Nitrites, inorganic, n.o.s. | 5.1 | UN2627 | II | 5A | 5A |
| 3-Nitro-4-chlorobenzotrifluoride | 6.1 | UN2307 | II | Prohibited | Prohibited |
| Nitro isobutane triol trinitrate | Forbidden | | | Prohibited | Prohibited |
| Nitro urea | 1.1D | UN0147 | II | Prohibited | Prohibited |
| 2-Nitro-2-methylpropanol nitrate | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| 6-Nitro-4-diazotoluene-3-sulfonic acid (dry) | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| N-Nitro-N-methylglycolamide nitrate | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| N-Nitroaniline | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Nitroanilines (o-; m-; p-;) | 6.1 | Prohibited | Prohibited | Prohibited | Prohibited |
| Nitroanisole, liquid | 6.1 | UN2730 | III | 6A | 6A |
| Nitroanisole, solid | 6.1 | UN3458 | III | 6A | 6A |
| Nitrobenzene | 6.1 | UN1662 | II | Prohibited | Prohibited |
| m-Nitrobenzene diazonium perchlorate | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Nitrobenzenesulfonic acid | 8 | UN2305 | II | 8A | 8A |
| Nitrobenzol, see Nitrobenzene | | | | | |
| 5-Nitrobenzotriazol | 1.1D | UN0385 | II | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Nitrobenzotrifluorides, liquid | 6.1 | UN2306 | II | Prohibited | Prohibited |
| Nitrobenzotrifluorides, solid | 6.1 | UN3431 | II | Prohibited | Prohibited |
| Nitrobromobenzenes <i>liquid</i> | 6.1 | UN2732 | III | 6A | 6A |
| Nitrobromobenzenes <i>solid</i> | 6.1 | UN3459 | III | 6A | 6A |
| Nitrocellulose, with not more than 12.6 percent, by dry mass mixture with or without plasticizer, with or without pigment | 4.1 | UN2557 | II | Prohibited | 4A |
| Nitrocellulose, dry or wetted with less than 25 percent water (or alcohol), by mass | 1.1D | UN0340 | II | Prohibited | Prohibited |
| Nitrocellulose membrane filters, with not more than 12.6 percent nitrogen, by dry mass | 4.1 | UN3270 | II | Prohibited | 4A |
| Nitrocellulose, plasticized with not less than 18 percent plasticizing substance, by mass | 1.3C | UN0343 | II | Prohibited | Prohibited |
| Nitrocellulose, solution, flammable with not more than 12.6 percent nitrogen, by mass, and not more than 55 percent nitrocellulose | 3 | UN2059 | II, III | Prohibited | 3A |
| Nitrocellulose, unmodified or plasticized with less than 18 percent plasticizing substance, by mass | 1.1D | UN0341 | II | Prohibited | Prohibited |
| Nitrocellulose, wetted with not less than 25 percent alcohol, by mass | 1.3C | UN0342 | II | Prohibited | Prohibited |
| Nitrocellulose, with alcohol with not less than 25 percent alcohol, by mass, and with not more than 12.6 percent nitrogen, by dry mass | 4.1 | UN2556 | II | Prohibited | 4A |
| Nitrocellulose with water with not less than 25 percent water, by mass | 4.1 | UN2555 | II | Prohibited | 4A |
| Nitrochlorobenzene, see Chloronitrobenzenes etc. | | | | | |
| Nitrocresols, solid | 6.1 | UN2446 | III | 6A | 6A |
| Nitrocresols, liquid | 6.1 | UN3434 | III | 6A | 6A |
| Nitroethane | 3 | UN2842 | III | Prohibited | 3A |
| Nitroethyl nitrate | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Nitroethylene polymer | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Nitrogen, compressed | 2.2 | UN1066 | n/a | 2B | 2B |
| Nitrogen dioxide, see Dinitrogen tetroxide | | | | | |
| Nitrogen fertilizer solution, see Fertilizer ammoniating solution etc. | | | | | |
| Nitrogen peroxide, see Dinitrogen tetroxide | | | | | |
| Nitrogen, refrigerated liquid cryogenic liquid | 2.2 | UN1977 | n/a | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| <i>Nitrogen tetroxide and nitric oxide mixtures, see Nitric oxide and nitrogen tetroxide mixtures</i> | | | | | |
| <i>Nitrogen tetroxide, see Dinitrogen tetroxide</i> | | | | | |
| <i>Nitrogen trichloride</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Nitrogen trifluoride, | 2.2 | UN2451 | n/a | Prohibited | Prohibited |
| <i>Nitrogen triiodide</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Nitrogen triiodide monoamine</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Nitrogen trioxide | 2.3 | UN2421 | n/a | Prohibited | Prohibited |
| Nitroglycerin, desensitized <i>with not less than 40 percent non-volatile water insoluble phlegmatizer, by mass</i> | 1.1D | UN0143 | II | Prohibited | Prohibited |
| <i>Nitroglycerin, liquid, not desensitized</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Nitroglycerin mixture, desensitized, liquid, flammable, n.o.s. <i>with not more than 30 percent nitroglycerin, by mass</i> | 3 | UN3343 | n/a | Prohibited | Prohibited |
| Nitroglycerin mixture, desensitized, liquid, n.o.s. <i>with not more than 30 percent nitroglycerin, by mass</i> | 3 | UN3357 | II | Prohibited | Prohibited |
| Nitroglycerin mixture, desensitized, solid, n.o.s. <i>with more than 2 percent but not more than 10 percent nitroglycerin, by mass</i> | 4.1 | UN3319 | II | Prohibited | Prohibited |
| Nitroglycerin, solution in alcohol, with <i>more than 1 percent but not more than 5 percent nitroglycerin</i> | 3 | UN3064 | II | Prohibited | Prohibited |
| Nitroglycerin, solution in alcohol, with <i>more than 1 percent but not more than 10 percent nitroglycerin</i> | 1.1D | UN0144 | II | Prohibited | Prohibited |
| Nitroglycerin, solution in alcohol, with <i>not more than 1 percent nitroglycerin</i> | 3 | UN1204 | II | Prohibited | Prohibited |
| <i>Nitroguanidine nitrate</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Nitroguanidine or Picrite, dry or wetted with less than 20 percent water, by mass</i> | 1.1D | UN0282 | II | Prohibited | Prohibited |
| <i>Nitroguanidine, wetted or Picrite, wetted with not less than 20 percent water, by mass</i> | 4.1 | UN1336 | I | Prohibited | Prohibited |
| <i>1-Nitrohydantoin</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Nitrohydrochloric acid | 8 | UN1798 | I | Prohibited | Prohibited |
| <i>Nitromannite (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Nitromannite, wetted, <i>see Mannitol hexanitrate, etc.</i> | | | | | |
| Nitromethane | 3 | UN1261 | II | Prohibited | 3A |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|------------------|---------------|------------|-----------------------|---------------------------|
| <i>Nitromuriatic acid, see Nitrohydrochloric acid</i> | | | | | |
| Nitronaphthalene | 4.1 | UN2538 | III | Prohibited | 4A |
| Nitrophenols (o-; m-; p-;) | 6.1 | UN1663 | III | 6A | 6A |
| <i>m-Nitrophenyldinitro methane</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| 4-Nitrophenylhydrazine, <i>with not less than 30 percent water, by mass</i> | 4.1 | UN3376 | I | Prohibited | Prohibited |
| Nitropropanes | 3 | UN2608 | III | Prohibited | 3A |
| p-Nitrosodimethylaniline | 4.2 | UN1369 | II | Prohibited | Prohibited |
| Nitrostarch, <i>dry or wetted with less than 20 percent water, by mass</i> | 1.1D | UN0146 | II | Prohibited | Prohibited |
| Nitrostarch, <i>wetted with not less than 20 percent water, by mass</i> | 4.1 | UN1337 | I | Prohibited | Prohibited |
| Nitrosugars (dry) | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Nitrosyl chloride | 2.3 | UN1069 | n/a | Prohibited | Prohibited |
| Nitrosylsulfuric acid, liquid | 8 | UN2308 | II | 8A | 8A |
| Nitrosylsulfuric acid, solid | 8 | UN3456 | II | 8A | 8A |
| Nitrotoluenes, <i>liquid</i> | 6.1 | UN1664 | II | Prohibited | Prohibited |
| Nitrotoluenes, <i>solid</i> | 6.1 | UN3446 | II | Prohibited | Prohibited |
| Nitrotoluidines (mono) | 6.1 | UN2660 | III | 6A | 6A |
| Nitrotriazolone or NTO | 1.1D | UN0490 | II | Prohibited | Prohibited |
| Nitrous oxide | 2.2 | UN1070 | n/a | 2B | 2B |
| Nitrous oxide, refrigerated liquid | 2.2 | UN2201 | n/a | Prohibited | Prohibited |
| Nitroxylenes, liquid | 6.1 | UN1665 | II | Prohibited | Prohibited |
| Nitroxylenes, solid | 6.1 | UN3447 | II | Prohibited | Prohibited |
| Nitroxylol, <i>see Nitroxylenes</i> | | | | | |
| Nonanes | 3 | UN1920 | III | Prohibited | 3A |
| <i>Non-flammable gas, n.o.s., see Compressed gas, etc. or Liquified gases, etc.</i> | | | | | |
| <i>Nonliquified gases, see Compressed gases, etc.</i> | | | | | |
| <i>Nonliquified hydrocarbon gas, see Hydrocarbon gas mixture, compressed, n.o.s.</i> | | | | | |
| Nonyltrichlorosilane | 8 | UN1799 | II | Prohibited | Prohibited |
| <i>Nordhausen acid, see Sulfuric acid, fuming etc.</i> | | | | | |
| <i>2,5-Norbormadiene, stabilized, see Bicyclo [2,2,1] hepta-2,5-diene, stabilized</i> | | | | | |
| O | | | | | |
| Octadecyltrichlorosilane | 8 | UN1800 | II | Prohibited | Prohibited |
| Octadiene | 3 | UN2309 | II | Prohibited | 3A |
| <i>1,7-Octadiene-3,5-diyne1,8-dimethoxy- 9-octadecynoic acid</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|-------------------------|----------------------|-------------------|------------------------------|----------------------------------|
| Octafluorobut-2-ene or Refrigerant gas R 1318 | 2.2 | UN2422 | n/a | Prohibited | Prohibited |
| Octafluorocyclobutane, or Refrigerant gas RC 318 | 2.2 | UN1976 | n/a | Prohibited | Prohibited |
| Octafluoropropane or Refrigerant gas R 218 | 2.2 | UN2424 | n/a | Prohibited | Prohibited |
| Octanes | 3 | UN1262 | II | Prohibited | 3A |
| Octogen, see Cyclotetramethylene tetranitramine, etc. | | | | | |
| Octolite or Octol, dry or wetted with less than 15 percent water, by mass | 1.1D | UN0266 | II | Prohibited | Prohibited |
| Octonal | 1.1D | UN0496 | n/a | Prohibited | Prohibited |
| Octyl aldehydes | 3 | UN1191 | III | Prohibited | 3A |
| Octyltrichlorosilane | 8 | UN1801 | II | Prohibited | Prohibited |
| Oil gas, compressed | 2.3 | UN1071 | n/a | Prohibited | Prohibited |
| <i>Oleum</i> , see Sulfuric acid, fuming etc. | | | | | |
| <i>Organic peroxide, type A, liquid or solid</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Organic peroxide type B, liquid | 5.2 | UN3101 | II | 5A | 5A |
| Organic peroxide type B, liquid, temperature controlled | 5.2 | UN3111 | II | Prohibited | Prohibited |
| Organic peroxide type B, solid | 5.2 | UN3102 | II | 5A | 5A |
| Organic peroxide type B, solid, temperature controlled | 5.2 | UN3112 | II | Prohibited | Prohibited |
| Organic peroxide type C, liquid | 5.2 | UN3103 | II | 5A | 5A |
| Organic peroxide type C, liquid, temperature controlled | 5.2 | UN3113 | II | Prohibited | Prohibited |
| Organic peroxide type C, solid | 5.2 | UN3104 | II | 5A | 5A |
| Organic peroxide type C, solid, temperature controlled | 5.2 | UN3114 | II | Prohibited | Prohibited |
| Organic peroxide type D, liquid | 5.2 | UN3105 | II | 5A | 5A |
| Organic peroxide type D, liquid, temperature controlled | 5.2 | UN3115 | II | Prohibited | Prohibited |
| Organic peroxide type D, solid | 5.2 | UN3106 | II | 5A | 5A |
| Organic peroxide type D, solid, temperature controlled | 5.2 | UN3116 | II | Prohibited | Prohibited |
| Organic peroxide type E, liquid | 5.2 | UN3107 | II | 5A | 5A |
| Organic peroxide type E, liquid, temperature controlled | 5.2 | UN3117 | II | Prohibited | Prohibited |
| Organic peroxide type E, solid | 5.2 | UN3108 | II | 5A | 5A |
| Organic peroxide type E, solid, temperature controlled | 5.2 | UN3118 | II | Prohibited | Prohibited |
| Organic peroxide type F, liquid | 5.2 | UN3109 | II | 5A | 5A |
| Organic peroxide type F, liquid, temperature controlled | 5.2 | UN3119 | II | Prohibited | Prohibited |
| Organic peroxide type F, solid | 5.2 | UN3110 | II | 5A | 5A |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Organic peroxide type F, solid, temperature controlled | 5.2 | UN3120 | II | Prohibited | Prohibited |
| Organic phosphate, mixed with compressed gas <i>or</i> Organic phosphate compound, mixed with compressed gas <i>or</i> Organic phosphorous compound, mixed with compressed gas | 2.3 | NA1955 | n/a | Prohibited | Prohibited |
| Organic pigments, self-heating | 4.2 | UN3313 | II, III | Prohibited | Prohibited |
| Organoarsenic compound, liquid, n.o.s. | 6.1 | UN3280 | I, II | Prohibited | Prohibited |
| Organoarsenic compound, liquid, n.o.s. | 6.1 | UN3280 | III | 6A | 6A |
| Organoarsenic compound, solid, n.o.s. | 6.1 | UN3465 | I | Prohibited | Prohibited |
| Organoarsenic compound, solid, n.o.s. | 6.1 | UN3465 | II, III | 6A | 6A |
| Organochlorine pesticides liquid, flammable, toxic, <i>flashpoint less than 23° C</i> | 3 | UN2762 | I, II | Prohibited | Prohibited |
| Organochlorine pesticide, liquid, toxic | 6.1 | UN2996 | I, II | Prohibited | Prohibited |
| Organochlorine pesticide, liquid, toxic | 6.1 | UN2996 | III | 6A | 6A |
| Organochlorine pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i> | 6.1 | UN2995 | I, II | Prohibited | Prohibited |
| Organochlorine pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i> | 6.1 | UN2995 | III | 6A | 6A |
| Organochlorine pesticides, solid, toxic | 6.1 | UN2761 | I, II | Prohibited | Prohibited |
| Organochlorine pesticides, solid, toxic | 6.1 | UN2761 | III | 6A | 6A |
| Organometallic compound, toxic, liquid, n.o.s. | 6.1 | UN3282 | I, II | Prohibited | Prohibited |
| Organometallic compound, toxic, liquid, n.o.s. | 6.1 | UN3282 | III | 6A | 6A |
| Organometallic compound, toxic, solid, n.o.s. | 6.1 | UN3467 | I, II | Prohibited | Prohibited |
| Organometallic compound, toxic, solid, n.o.s. | 6.1 | UN3467 | III | 6A | 6A |
| Organometallic substance, liquid, pyrophoric | 4.2 | UN3392 | I | Prohibited | Prohibited |
| Organometallic substance, liquid, pyrophoric, water-reactive | 4.2 | UN3394 | I | Prohibited | Prohibited |
| Organometallic substance, liquid, pyrophoric, water-reactive | 4.3 | UN3398 | I, II, III | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Organometallic substance, liquid, pyrophoric, water-reactive, flammable | 4.3 | UN3399 | I, II, III | Prohibited | Prohibited |
| Organometallic substance, solid, pyrophoric | 4.2 | UN3391 | I | Prohibited | Prohibited |
| Organometallic substance, solid, pyrophoric, water-reactive | 4.2 | UN3393 | I | Prohibited | Prohibited |
| Organometallic substance, solid, self heating | 4.2 | UN3400 | II, III | Prohibited | Prohibited |
| Organometallic substance, solid, water-reactive | 4.3 | UN3395 | I, II, III | Prohibited | Prohibited |
| Organometallic substance, solid, water-reactive, flammable | 4.3 | UN3396 | I, II, III | Prohibited | Prohibited |
| Organometallic substance, solid, water-reactive, self-heating | 4.3 | UN3397 | I, II, III | Prohibited | Prohibited |
| Organophosphorus compound, toxic, flammable, n.o.s. | 6.1 | UN3279 | I, II | Prohibited | Prohibited |
| Organophosphorus compound, toxic, liquid, n.o.s. | 6.1 | UN3278 | I, II | Prohibited | Prohibited |
| Organophosphorus compound, toxic, liquid, n.o.s. | 6.1 | UN3278 | III | 6A | 6A |
| Organophosphorus compound, toxic, solid, n.o.s. | 6.1 | UN3464 | I, II | Prohibited | Prohibited |
| Organophosphorus compound, toxic, solid, n.o.s. | 6.1 | UN3464 | III | 6A | 6A |
| Organophosphorus pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i> | 3 | UN2784 | I, II | Prohibited | Prohibited |
| Organophosphorus pesticides, liquid, toxic | 6.1 | UN3018 | I, II | Prohibited | Prohibited |
| Organophosphorus pesticides, liquid, toxic | 6.1 | UN3018 | III | 6A | 6A |
| Organophosphorus pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i> | 6.1 | UN3017 | I, II | Prohibited | Prohibited |
| Organophosphorus pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i> | 6.1 | UN3017 | III | 6A | 6A |
| Organophosphorus pesticides, solid, toxic | 6.1 | UN2783 | I, II | Prohibited | Prohibited |
| Organophosphorus pesticides, solid, toxic | 6.1 | UN2783 | III | 6A | 6A |
| Organotin compounds, liquid, n.o.s. | 6.1 | UN2788 | I, II | Prohibited | Prohibited |
| Organotin compounds, liquid, n.o.s. | 6.1 | UN2788 | III | 6A | 6A |
| Organotin compounds, solid, n.o.s. | 6.1 | UN3146 | I, II | Prohibited | Prohibited |
| Organotin compounds, solid, n.o.s. | 6.1 | UN3146 | III | 6A | 6A |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Organotin pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i> | 3 | UN2787 | I, II | Prohibited | Prohibited |
| Organotin pesticides, liquid, toxic | 6.1 | UN3020 | I, II | Prohibited | Prohibited |
| Organotin pesticides, liquid, toxic | 6.1 | UN3020 | III | 6A | 6A |
| Organotin pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i> | 6.1 | UN3019 | I, II | Prohibited | Prohibited |
| Organotin pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i> | 6.1 | UN3019 | III | 6A | 6A |
| Organotin pesticides, solid, toxic | 6.1 | UN2786 | I, II | Prohibited | Prohibited |
| Organotin pesticides, solid, toxic | 6.1 | UN2786 | III | 6A | 6A |
| <i>Orthonitroaniline, see Nitroanilines etc.</i> | | | | | |
| Osmium tetroxide | 6.1 | UN2471 | I | Prohibited | Prohibited |
| Other regulated substances, liquid, n.o.s. | 9 | NA3082 | III | 9C | 9C |
| Other regulated substances, solid, n.o.s. | 9 | NA3077 | III | 9C | 9C |
| Oxidizing liquid, corrosive, n.o.s. | 5.1 | UN3098 | I, II | Prohibited | Prohibited |
| Oxidizing liquid, corrosive, n.o.s. | 5.1 | UN3098 | III | 5A | 5A |
| Oxidizing liquid, n.o.s. | 5.1 | UN3139 | I | Prohibited | Prohibited |
| Oxidizing liquid, n.o.s. | 5.1 | UN3139 | II, III | 5A | 5A |
| Oxidizing liquid, toxic, n.o.s. | 5.1 | UN3099 | I, II | Prohibited | Prohibited |
| Oxidizing liquid, toxic, n.o.s. | 5.1 | UN3099 | III | 5A | 5A |
| Oxidizing solid, corrosive, n.o.s. | 5.1 | UN3085 | I, II | Prohibited | Prohibited |
| Oxidizing solid, corrosive, n.o.s. | 5.1 | UN3085 | III | 5A | 5A |
| Oxidizing solid, flammable, n.o.s. | 5.1 | UN3137 | I | Prohibited | Prohibited |
| Oxidizing solid, n.o.s. | 5.1 | UN1479 | I | Prohibited | Prohibited |
| Oxidizing solid, n.o.s. | 5.1 | UN1479 | II, III | 5A | 5A |
| Oxidizing solid, selfheating, n.o.s. | 5.1 | UN3100 | II | Prohibited | Prohibited |
| Oxidizing solid, toxic, n.o.s. | 5.1 | UN3087 | I, II | Prohibited | Prohibited |
| Oxidizing solid, toxic, n.o.s. | 5.1 | UN3087 | III | 5A | 5A |
| Oxidizing solid, water reactive, n.o.s. | 5.1 | UN3121 | n/a | Prohibited | Prohibited |
| Oxygen, compressed | 2.2 | UN1072 | n/a | 2B | 2B |
| Oxygen difluoride, compressed | 2.3 | UN2190 | n/a | Prohibited | Prohibited |
| Oxygen generator, chemical (<i>including when contained in associated equipment, e.g., passenger service units (PSUs), portable breathing equipment (PBE), etc.</i>) | 5.1 | UN3356 | II | Prohibited | Prohibited |
| Oxygen generator, chemical, spent | 9 | NA3356 | III | Prohibited | Prohibited |
| Oxygen, refrigerated liquid (cryogenic liquid) | 2.2 | UN1073 | n/a | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| P | | | | | |
| Paint including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler, and liquid lacquer base | 3 | UN1263 | I, II, III | Prohibited | 3A |
| Paint or Paint related material | 8 | UN3066 | II, III | 8A | 8A |
| Paint related material including paint thinning, drying, removing, or reducing compound | 3 | UN1263 | I, II, III | Prohibited | 8A |
| Paint, corrosive, flammable (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) | 8 | UN3470 | II | Prohibited | 8A |
| Paint related material corrosive, flammable (including paint thinning or reducing compound) | 8 | UN3470 | II | Prohibited | 8A |
| Paint, flammable, corrosive (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) | 3 | UN3469 | I, II | Prohibited | Prohibited |
| Paint, flammable, corrosive (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) | 3 | UN3469 | III | Prohibited | 3A |
| Paint related material, flammable, corrosive (including paint thinning or reducing compound) | 3 | UN3469 | I, II | Prohibited | Prohibited |
| Paint related material, flammable, corrosive (including paint thinning or reducing compound) | 3 | UN3469 | III | Prohibited | 3A |
| Paper, unsaturated oil treated incompletely dried (including carbon paper) | 4.2 | UN1379 | III | Prohibited | Prohibited |
| Paraformaldehyde | 4.1 | UN2213 | III | Prohibited | 4A |
| Paraldehyde | 3 | UN1264 | III | Prohibited | 3A |
| Paranitroaniline, solid, see Nitroanilines etc. | | | | | |
| Parathion and compressed gas mixture | 2.3 | NA1967 | n/a | Prohibited | Prohibited |
| Paris green, solid, see Copper acetoarsenite | | | | | |
| PCB, see Polychlorinated biphenyls | | | | | |
| Pentaporane | 4.2 | UN1380 | I | Prohibited | Prohibited |
| Pentachloroethane | 6.1 | UN1669 | II | Prohibited | Prohibited |
| Pentachlorophenol | 6.1 | UN3155 | II | Prohibited | Prohibited |
| Pentaerythrite tetranitrate (dry) | Forbidden | | | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Pentaerythrite tetranitrate <i>or</i> Pentaerythritol tetranitrate <i>or</i> PETN, with not less than 7 percent wax by mass | 1.1D | UN0411 | II | Prohibited | Prohibited |
| Pentaerythrite tetranitrate mixture, desensitized, solid, n.o.s. <i>or</i> Pentaerythritol tetranitrate mixture, desensitized, solid, n.o.s. <i>or</i> PETN mixture, desensitized, solid, n.o.s., with more than 10 percent but not more than 20 percent PETN, by mass | 4.1 | UN3344 | II | Prohibited | Prohibited |
| Pentaerythrite tetranitrate, wetted <i>or</i> Pentaerythritol tetranitrate, wetted <i>or</i> PETN, wetted with not less than 25 percent water, by mass, <i>or</i> Pentaerythrite tetranitrate, <i>or</i> Pentaerythritol tetranitrate, <i>or</i> PETN, desensitized with not less than 15 percent phlegmatizer by mass | 1.1D | UN0150 | II | Prohibited | Prohibited |
| Pentaerythritol tetranitrate, see Pentaerythrite tetranitrate, etc. | | | | | |
| Pentafluoroethane <i>or</i> Refrigerant gas R 125 | 2.2 | UN3220 | n/a | 2B | 2B |
| Pentamethylheptane | 3 | UN2286 | III | Prohibited | 3A |
| Pentane-2,4-dione | 3 | UN2310 | III | Prohibited | 3A |
| Pentanes | 3 | UN1265 | I, II | Prohibited | 3A |
| Pentanitroaniline (dry) | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Pentanol | 3 | UN1105 | II, III | Prohibited | 3A |
| 1-Pentene (<i>n</i> -amylene) | 3 | UN1108 | I | Prohibited | 3A |
| 1-Pentol | 8 | UN2705 | II | 8A | 8A |
| Pentolite, dry <i>or</i> wetted with less than 15 percent water, by mass | 1.1D | UN0151 | II | Prohibited | Prohibited |
| Pepper spray, see Aerosols, etc. <i>or</i> Self-defense spray, non-pressurized | | | | | |
| Perchlorates, inorganic, aqueous solution, n.o.s. | 5.1 | UN3211 | II, III | 5A | 5A |
| Perchlorates, inorganic, n.o.s. | 5.1 | UN1481 | II, III | 5A | 5A |
| Perchloric acid with more than 50 percent but not more than 72 percent acid, by mass | 5.1 | UN1873 | I | Prohibited | Prohibited |
| Perchloric acid with not more than 50 percent acid by mass | 8 | UN1802 | II | Prohibited | Prohibited |
| Perchloric acid, with more than 72 percent acid by mass | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Perchloroethylene, see Tetrachloroethylene | | | | | |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Perchloromethyl mercaptan | 6.1 | UN1670 | I | Prohibited | Prohibited |
| Perchloryl fluoride | 2.3 | UN3083 | n/a | Prohibited | Prohibited |
| <i>Percussion caps, see Primers, cap type</i> | | | | | |
| Perfluoro (ethyl vinyl ether) | 2.1 | UN3154 | n/a | Prohibited | 2A |
| Perfluoro (methyl vinyl ether) | 2.1 | UN3153 | n/a | Prohibited | 2A |
| <i>Perfluoro-2-butene, see Octafluorobut-2-ene</i> | | | | | |
| Perfumery products with flammable solvents | 3 | UN1266 | II, III | Prohibited | 3A |
| Permanganates, inorganic, aqueous solution, n.o.s. | 5.1 | UN3214 | II | 5A | 5A |
| Permanganates, inorganic, n.o.s. | 5.1 | UN1482 | II, III | 5A | 5A |
| Peroxides, inorganic, n.o.s. | 5.1 | UN1483 | II | Prohibited | Prohibited |
| Peroxides, inorganic, n.o.s. | 5.1 | UN1483 | III | 5A | 5A |
| Permeation devices for calibrating air quality monitoring equipment see CFR 49 173.175 | | | | | |
| <i>Peroxyacetic acid, with more than 43 percent and with more than 6 percent hydrogen peroxide</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Persulfates, inorganic, aqueous solution, n.o.s. | 5.1 | UN3216 | III | 5A | 5A |
| Persulfates, inorganic, n.o.s. | 5.1 | UN3215 | III | 5A | 5A |
| Pesticides, liquid, flammable, toxic, flashpoint less than 23° C | 3 | UN3021 | I, II | Prohibited | Prohibited |
| Pesticides, liquid, toxic, flammable, flashpoint not less than 23° C | 6.1 | UN2903 | I, II | Prohibited | Prohibited |
| Pesticides, liquid, toxic, flammable, flashpoint not less than 23° C | 6.1 | UN2903 | III | 6A | 6A |
| Pesticides, liquid, toxic, n.o.s. | 6.1 | UN2902 | I, II | Prohibited | Prohibited |
| Pesticides, liquid, toxic, n.o.s. | 6.1 | UN2902 | III | 6A | 6A |
| Pesticides, solid, toxic, n.o.s. | 6.1 | UN2588 | I, II | Prohibited | Prohibited |
| Pesticides, solid, toxic, n.o.s. | 6.1 | UN2588 | III | 6A | 6A |
| PETN, see Pentaerythrite tetranitrate | | | | | |
| PETN/TNT, see Pentolite, etc. | | | | | |
| Petro, see Gasoline | | | | | |
| Petroleum crude oil | 3 | UN1267 | I | Prohibited | Prohibited |
| Petroleum crude oil | 3 | UN1267 | II, III | Prohibited | 3A |
| Petroleum distillates, n.o.s. or Petroleum products, n.o.s. | 3 | UN1268 | I, II, III | Prohibited | 3A |
| Petroleum gases, liquified or Liquified petroleum gas | 2.1 | UN1075 | n/a | Prohibited | 2A |
| Petroleum oil | 3 | NA1270 | I | Prohibited | Prohibited |
| Petroleum oil | 3 | NA1270 | II, III | Prohibited | 3A |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|------------------|---------------|------------|-----------------------|---------------------------|
| Petroleum sour crude oil, flammable, toxic | 3 | UN3494 | I, II, III | Prohibited | Prohibited |
| Phenacyl bromide | 6.1 | UN2645 | II | Prohibited | Prohibited |
| Phenetidines | 6.1 | UN2311 | III | 6A | 6A |
| Phenol, molten | 6.1 | UN2312 | II | Prohibited | Prohibited |
| Phenol, solid | 6.1 | UN1671 | II | Prohibited | Prohibited |
| Phenol solutions | 6.1 | UN2821 | II | Prohibited | Prohibited |
| Phenol solutions | 6.1 | UN2821 | III | 6A | 6A |
| Phenolsulfonic acid, liquid | 8 | UN1803 | II | 8A | 8A |
| Phenoxyacetic acid derivative pesticide, liquid, flammable, toxic <i>flashpoint less than 23° C</i> | 3 | UN3346 | I, II | Prohibited | Prohibited |
| Phenoxyacetic acid derivative pesticide, liquid, toxic | 6.1 | UN3348 | I | Prohibited | Prohibited |
| Phenoxyacetic acid derivative pesticide, liquid, toxic | 6.1 | UN3348 | II, III | 6A | 6A |
| Phenoxyacetic acid derivative pesticide, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i> | 6.1 | UN3347 | I | Prohibited | Prohibited |
| Phenoxyacetic acid derivative pesticide, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i> | 6.1 | UN3347 | II, III | 6A | 6A |
| Phenoxyacetic acid derivative pesticide, solid, toxic | 6.1 | UN3345 | I | Prohibited | Prohibited |
| Phenoxyacetic acid derivative pesticide, solid, toxic | 6.1 | UN3345 | II, III | 6A | 6A |
| Phenyl chloroformate | 6.1 | UN2746 | II | Prohibited | Prohibited |
| Phenyl isocyanate | 6.1 | UN2487 | I | Prohibited | Prohibited |
| Phenyl mercaptan | 6.1 | UN2337 | I | Prohibited | Prohibited |
| Phenyl phosphorus dichloride | 8 | UN2798 | II | 8A | 8A |
| Phenyl phosphorus thiodichloride | 8 | UN2799 | II | 8A | 8A |
| Phenyl urea pesticides, liquid, toxic | 6.1 | UN3002 | I, II | Prohibited | Prohibited |
| Phenyl urea pesticides, liquid, toxic | 6.1 | UN3002 | III | 6A | 6A |
| Phenylacetonitrile, liquid | 6.1 | UN2470 | III | 6A | 6A |
| Phenylacetyl chloride | 8 | UN2577 | II | 8A | 8A |
| Phenylcarbylamine chloride | 6.1 | UN1672 | I | Prohibited | Prohibited |
| <i>m</i> -Phenylene diaminediperchlorate (dry) | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Phenylenediamines (<i>o</i> -; <i>m</i> -; <i>p</i> -;) | 6.1 | UN1673 | III | 6A | 6A |
| Phenylhydrazine | 6.1 | UN2572 | II | Prohibited | Prohibited |
| Phenylmercuric acetate | 6.1 | UN1674 | II | Prohibited | Prohibited |
| Phenylmercuric compounds, n.o.s. | 6.1 | UN2026 | I, II | Prohibited | Prohibited |
| Phenylmercuric compounds, n.o.s. | 6.1 | UN2026 | III | 6A | 6A |
| Phenylmercuric hydroxide | 6.1 | UN1894 | II | Prohibited | Prohibited |
| Phenylmercuric nitrate | 6.1 | UN1895 | II | Prohibited | Prohibited |
| Phenyltrichlorosilane | 8 | UN1804 | II | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|------------------|---------------|------------|-----------------------|---------------------------|
| Phosgene | 2.3 | UN1076 | | Prohibited | Prohibited |
| 9-Phosphabicyclononanes or Cyclooctadiene phosphines | 4.2 | UN2940 | II | Prohibited | Prohibited |
| Phosphine | 2.3 | UN2199 | | Prohibited | Prohibited |
| Phosphoric acid solution | 8 | UN1805 | III | 8A | 8A |
| Phosphoric acid, solid | 8 | UN3453 | III | 8A | 8A |
| <i>Phosphoric acid triethyleneimine, see Tris-(1-aziridinyl)phosphine oxide, solution</i> | | | | | |
| Phosphorus, amorphous | 4.1 | UN1338 | III | Prohibited | Prohibited |
| <i>Phosphoric anhydride, see Phosphorus pentoxide</i> | | | | | |
| Phosphorous acid | 8 | UN2834 | III | 8A | 8A |
| <i>Phosphorus bromide, see Phosphorus tribromide</i> | | | | | |
| <i>Phosphorus chloride, see Phosphorus trichloride</i> | | | | | |
| Phosphorus heptasulfide, <i>free from yellow or white phosphorus</i> | 4.1 | UN1339 | II | Prohibited | Prohibited |
| Phosphorus oxybromide | 8 | UN1939 | II | Prohibited | Prohibited |
| Phosphorus oxybromide, molten | 8 | UN2576 | II | Prohibited | Prohibited |
| Phosphorus oxychloride | 8 | UN1810 | II | Prohibited | Prohibited |
| Phosphorus pentabromide | 8 | UN2691 | II | 8A | 8A |
| Phosphorus pentachloride | 8 | UN1806 | II | Prohibited | Prohibited |
| Phosphorus pentafluoride | 2.3 | UN2198 | | Prohibited | Prohibited |
| Phosphorus pentasulfide, <i>free from yellow or white phosphorus</i> | 4.3 | UN1340 | II | Prohibited | 4A |
| Phosphorus pentoxide | 8 | UN1807 | II | 8A | 8A |
| Phosphorus sesquisulfide, <i>free from yellow or white phosphorus</i> | 4.1 | UN1341 | II | Prohibited | Prohibited |
| Phosphorus tribromide | 8 | UN1808 | II | Prohibited | Prohibited |
| Phosphorus trichloride | 6.1 | UN1809 | I | Prohibited | Prohibited |
| Phosphorus trioxide | 8 | UN2578 | III | 8A | 8A |
| Phosphorus trisulfide, <i>free from yellow or white phosphorus</i> | 4.1 | UN1343 | II | Prohibited | Prohibited |
| Phosphorus, white dry or Phosphorus, white, under water or Phosphorus white, in solution or Phosphorus, yellow dry or Phosphorus, yellow, under water or Phosphorus, yellow, in solution | 4.2 | UN1381 | I | Prohibited | Prohibited |
| Phosphorus white, molten | 4.2 | UN2447 | I | Prohibited | Prohibited |
| <i>Phosphorus (white or red) and a chlorate, mixtures of</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Phosphoryl chloride, <i>see Phosphorus oxychloride</i> | | | | | |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Phthalic anhydride <i>with more than .05 percent maleic anhydride</i> | 8 | UN2214 | III | 8A | 8A |
| Picolines | 3 | UN2313 | III | Prohibited | 3A |
| Picric acid, <i>see</i> Trinitrophenol, <i>etc.</i> | | | | | |
| Picrite, <i>see</i> Nitroguanidine, <i>etc.</i> | | | | | |
| Picryl chloride, <i>see</i> Trinitrochlorobenzene | | | | | |
| Pine oil | 3 | UN1272 | III | Prohibited | 3A |
| alphaPinene | 3 | UN2368 | III | Prohibited | 3A |
| Piperazine | 8 | UN2579 | III | 8A | 8A |
| Piperidine | 8 | UN2401 | I | Prohibited | Prohibited |
| <i>Pivaloyl chloride</i> , <i>see</i> Trimethylacetyl chloride | | | | | |
| Plastic molding compound <i>in dough, sheet, or extruded rope form evolving flammable vapor</i> | 9 | UN3314 | III | Prohibited | 9C |
| <i>Plastic solvent, n.o.s.</i> , <i>see</i> Flammable liquids, <i>n.o.s.</i> | | | | | |
| Plastics, nitrocellulose-based, self-heating, <i>n.o.s.</i> | 4.2 | UN2006 | III | Prohibited | Prohibited |
| <i>Poisonous gases, n.o.s.</i> , <i>see</i> Compressed or Liquified gases, flammable or toxic, <i>n.o.s.</i> | | | | | |
| <i>Polyalkylamines, n.o.s.</i> , <i>see</i> Amines, <i>etc.</i> | | | | | |
| Polyamines, flammable, corrosive, <i>n.o.s.</i> <i>see</i> Amines, flammable, corrosive, <i>n.o.s.</i> | | | | | |
| Polyamines, liquid, corrosive, <i>n.o.s.</i> <i>see</i> Amines, liquid, corrosive, <i>n.o.s.</i> | | | | | |
| Polyamines, liquid, corrosive, flammable, <i>n.o.s.</i> <i>see</i> Amines, liquid, corrosive, flammable, <i>n.o.s.</i> | | | | | |
| Polychlorinated biphenyls, liquid | 9 | UN2315 | II | Prohibited | 9C |
| Polychlorinated biphenyls, solid | 9 | UN3432 | II | Prohibited | 9C |
| Polyester resin kit | 3 | UN3269 | n/a | Prohibited | 3A |
| Polyhalogenated biphenyls, liquid <i>or</i> Polyhalogenated terphenyls, liquid | 9 | UN3151 | II | Prohibited | 9C |
| Polyhalogenated biphenyls, solid <i>or</i> Polyhalogenated terphenyls, solid | 9 | UN3152 | II | Prohibited | 9C |
| Polymeric beads, expandable, <i>evolving flammable vapor</i> | 9 | UN2211 | III | Prohibited | 9C |
| Potassium | 4.3 | UN2257 | I | Prohibited | Prohibited |
| Potassium arsenate | 6.1 | UN1677 | II | Prohibited | Prohibited |
| Potassium arsenite | 6.1 | UN1678 | II | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|------------------|---------------|------------|-----------------------|---------------------------|
| <i>Potassium bisulfite solution, see Bisulfites, inorganic, aqueous solutions, n.o.s.</i> | | | | | |
| Potassium borohydride | 4.3 | UN1870 | I | Prohibited | Prohibited |
| Potassium bromate | 5.1 | UN1484 | II | 5A | 5A |
| <i>Potassium carbonyl</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Potassium chlorate | 5.1 | UN1485 | II | 5A | 5A |
| <i>Potassium chlorate mixed with mineral oil, see Explosive, blasting, type C</i> | | | | | |
| Potassium chlorate, aqueous solution | 5.1 | UN2427 | II, III | 5A | 5A |
| Potassium cuprocyanide | 6.1 | UN1679 | II | Prohibited | Prohibited |
| Potassium cyanide, solid | 6.1 | UN1680 | I | Prohibited | Prohibited |
| Potassium cyanide solution | 6.1 | UN3413 | I | Prohibited | Prohibited |
| <i>Potassium dichloro isocyanurate or Potassium dichloro-s-triazinetrione, see Dichloroisocyanuric acid, dry or Dichloroisocyanuric acid salts etc.</i> | | | | | |
| Potassium dithionite or Potassium hydrosulfite | 4.2 | UN1929 | II | Prohibited | Prohibited |
| Potassium fluoride, solid | 6.1 | UN1812 | III | 6A | 6A |
| Potassium fluoride solution | 6.1 | UN3422 | III | 6A | 6A |
| Potassium fluoroacetate | 6.1 | UN2628 | I | Prohibited | Prohibited |
| Potassium fluorosilicate | 6.1 | UN2655 | III | 6A | 6A |
| <i>Potassium hydrate, see Potassium hydroxide, solid</i> | | | | | |
| <i>Potassium hydrogen fluoride solution, see Corrosive liquid, n.o.s.</i> | | | | | |
| Potassium hydrogen fluoride, see Potassium hydrogen difluoride | | | | | |
| Potassium hydrogen sulfate | 8 | UN2509 | II | 8A | 8A |
| Potassium hydrogendifluoride, <i>solid</i> | 8 | UN1811 | II | 8A | 8A |
| Potassium hydrogendifluoride, <i>solution</i> | 8 | UN3421 | II | 8A | 8A |
| Potassium hydrosulfite, see Potassium dithionite | | | | | |
| <i>Potassium hydroxide, liquid, see Potassium hydroxide solution</i> | | | | | |
| Potassium hydroxide, solid | 8 | UN1813 | II | 8A | 8A |
| Potassium hydroxide, solution | 8 | UN1814 | II, III | 8A | 8A |
| <i>Potassium hypochlorite, solution, see Hypochlorite solutions</i> | | | | | |
| Potassium, metal alloys, liquid | 4.3 | UN1420 | I | Prohibited | 4A |
| Potassium, metal alloys, solid | 4.3 | UN3403 | I | Prohibited | Prohibited |
| Potassium metavanadate | 6.1 | UN2864 | II | Prohibited | Prohibited |
| Potassium monoxide | 8 | UN2033 | II | 8A | 8A |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Potassium nitrate | 5.1 | UN1486 | III | 5A | 5A |
| Potassium nitrate and sodium nitrite mixtures | 5.1 | UN1487 | II | 5A | 5A |
| Potassium nitrite | 5.1 | UN1488 | II | 5A | 5A |
| Potassium perchlorate | 5.1 | UN1489 | II | 5A | 5A |
| Potassium permanganate | 5.1 | UN1490 | II | 5A | 5A |
| Potassium peroxide | 5.1 | UN1491 | I | Prohibited | Prohibited |
| Potassium persulfate | 5.1 | UN1492 | III | 5A | 5A |
| Potassium phosphide | 4.3 | UN2012 | I | Prohibited | Prohibited |
| <i>Potassium selenate, see Selenates or Selenites</i> | | | | | |
| <i>Potassium selenite, see Selenates or Selenites</i> | | | | | |
| Potassium sodium alloys, liquid | 4.3 | UN1422 | I | Prohibited | Prohibited |
| Potassium sodium alloys, solid | 4.3 | UN3404 | I | Prohibited | Prohibited |
| Potassium sulfide, anhydrous or Potassium sulfide with less than 30 percent water of crystallization | 4.2 | UN1382 | II | Prohibited | Prohibited |
| Potassium sulfide, hydrated with not less than 30 percent water of crystallization | 8 | UN1847 | II | Prohibited | Prohibited |
| Potassium superoxide | 5.1 | UN2466 | I | Prohibited | Prohibited |
| Powder cake, wetted or Powder paste, wetted with not less than 25 percent water, by mass | 1.3C | UN0159 | II | Prohibited | Prohibited |
| Powder cake, wetted or Powder paste, wetted with not less than 17 percent alcohol by mass | 1.1C | UN0433 | II | Prohibited | Prohibited |
| Powder paste, see Powder cake, etc. | | | | | |
| Powder, smokeless | 1.1C | UN0160 | II | Prohibited | Prohibited |
| Powder, smokeless | 1.3C | UN0161 | II | Prohibited | Prohibited |
| Powder, smokeless | 1.4C | UN0509 | n/a | Prohibited | Prohibited |
| Primers, cap type | 1.1B | UN0377 | II | Prohibited | Prohibited |
| Primers, cap type | 1.4B | UN0378 | II | Prohibited | Prohibited |
| Primers, cap type | 1.4S | UN0044 | II | Prohibited | Prohibited |
| <i>Primers, small arms, see Primers, cap type</i> | | | | | |
| Primers, tubular | 1.3G | UN0319 | II | Prohibited | Prohibited |
| Primers, tubular | 1.4G | UN0320 | II | Prohibited | Prohibited |
| Primers, tubular | 1.4S | UN0376 | II | Prohibited | Prohibited |
| Printing ink, flammable or Printing ink related material (including printing ink thinning or reducing compound), flammable | 3 | UN1210 | I, II, III | Prohibited | 3A |
| <i>Projectiles, illuminating, see Ammunition, illuminating, etc.</i> | | | | | |
| Projectiles, inert with tracer | 1.3G | UN0424 | II | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Projectiles, <i>inert with tracer</i> | 1.4G | UN0425 | II | Prohibited | Prohibited |
| Projectiles, <i>inert with tracer</i> | 1.4S | UN0345 | II | Prohibited | Prohibited |
| Projectiles, <i>with burster or expelling charge</i> | 1.2D | UN0346 | II | Prohibited | Prohibited |
| Projectiles, <i>with burster or expelling charge</i> | 1.2F | UN0426 | II | Prohibited | Prohibited |
| Projectiles, <i>with burster or expelling charge</i> | 1.2G | UN0434 | II | Prohibited | Prohibited |
| Projectiles, <i>with burster or expelling charge</i> | 1.4D | UN0347 | II | Prohibited | Prohibited |
| Projectiles, <i>with burster or expelling charge</i> | 1.4F | UN0427 | II | Prohibited | Prohibited |
| Projectiles, <i>with burster or expelling charge</i> | 1.4G | UN0435 | II | Prohibited | Prohibited |
| Projectiles, <i>with bursting charge</i> | 1.1D | UN0168 | II | Prohibited | Prohibited |
| Projectiles, <i>with bursting charge</i> | 1.1F | UN0167 | II | Prohibited | Prohibited |
| Projectiles, <i>with bursting charge</i> | 1.2D | UN0169 | II | Prohibited | Prohibited |
| Projectiles, <i>with bursting charge</i> | 1.2F | UN0324 | II | Prohibited | Prohibited |
| Projectiles, <i>with bursting charge</i> | 1.4D | UN0344 | II | Prohibited | Prohibited |
| <i>Propadiene mixed with acetylene, see Methyl acetylene and propadiene mixtures, stabilized</i> | | | | | |
| Propadiene, stabilized | 2.1 | UN2200 | n/a | Prohibited | Prohibited |
| Propane <i>see also</i> Petroleum gases, liquified | 2.1 | UN1978 | n/a | Prohibited | 2A |
| Propanethiols | 3 | UN2402 | II | Prohibited | 3A |
| n-Propanol or Propyl alcohol, normal | 3 | UN1274 | II, III | Prohibited | 3A |
| Propellant, liquid | 1.1C | UN0497 | II | Prohibited | Prohibited |
| Propellant, liquid | 1.3C | UN0495 | II | Prohibited | Prohibited |
| Propellant, solid | 1.1C | UN0498 | II | Prohibited | Prohibited |
| Propellant, solid | 1.3C | UN0499 | II | Prohibited | Prohibited |
| Propellant, solid | 1.4C | UN0501 | n/a | Prohibited | Prohibited |
| Propionaldehyde | 3 | UN1275 | II | Prohibited | 3A |
| Propionic acid <i>with not less than 90 percent acid by mass</i> | 8 | UN3463 | II | Prohibited | 8A |
| Propionic acid <i>with not less than 10 percent and less than 90 percent acid by mass</i> | 8 | UN1848 | III | 8A | 8A |
| Propionic anhydride | 8 | UN2496 | III | 8A | 8A |
| Propionitrile | 3 | UN2404 | II | Prohibited | Prohibited |
| Propionyl chloride | 3 | UN1815 | II | Prohibited | Prohibited |
| n-Propyl acetate | 3 | UN1276 | II | Prohibited | 3A |
| Propyl alcohol, <i>see</i> Propanol | | | | | |
| n-Propyl benzene | 3 | UN2364 | III | Prohibited | 3A |
| <i>Propyl chloride see</i> 1-Chloropropane | | | | | |
| n-Propyl chloroformate | 6.1 | UN2740 | I | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|------------------|---------------|------------|-----------------------|---------------------------|
| Propyl formates | 3 | UN1281 | II | Prohibited | 3A |
| n-Propyl isocyanate | 6.1 | UN2482 | I | | |
| <i>Propyl mercaptan, see</i> Propanethiols | | | | | |
| n-Propyl nitrate | 3 | UN1865 | II | Prohibited | 3A |
| Propylamine | 3 | UN1277 | II | Prohibited | Prohibited |
| Propylene <i>see also</i> Petroleum gases, liquified | 2.1 | UN1077 | n/a | Prohibited | 2A |
| Propylene chlorohydrin | 6.1 | UN2611 | II | Prohibited | Prohibited |
| Propylene oxide | 3 | UN1280 | I | Prohibited | Prohibited |
| Propylene tetramer | 3 | UN2850 | III | Prohibited | 3A |
| 1,2-Propylenediamine | 8 | UN2258 | II | Prohibited | Prohibited |
| Propyleneimine, stabilized | 3 | UN1921 | I | Prohibited | Prohibited |
| Propyltrichlorosilane | 8 | UN1816 | II | Prohibited | Prohibited |
| <i>Prussic acid, see</i> Hydrogen cyanide etc. | | | | | |
| Pyrethroid pesticide, liquid, flammable, toxic, <i>flashpoint less than 23° C</i> | 3 | UN3350 | I, II | Prohibited | Prohibited |
| Pyrethroid pesticide, liquid, flammable, toxic, <i>flashpoint less than 23° C</i> | 6.1 | UN3351 | I | Prohibited | Prohibited |
| Pyrethroid pesticide, liquid, flammable, toxic, <i>flashpoint less than 23° C</i> | 6.1 | UN3351 | II, III | 6A | 6A |
| Pyrethroid pesticide, liquid, toxic | 6.1 | UN3352 | I | Prohibited | Prohibited |
| Pyrethroid pesticide, liquid, toxic | 6.1 | UN3352 | II, III | 6A | 6A |
| Pyrethroid pesticide, solid, toxic | 6.1 | UN3349 | I | Prohibited | Prohibited |
| Pyrethroid pesticide, solid, toxic | 6.1 | UN3349 | II, III | 6A | 6A |
| Pyridine | 3 | UN1282 | II | Prohibited | Prohibited |
| Pyridine perchlorate | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Pyrophoric liquid, inorganic, n.o.s. | 4.2 | UN3194 | I | Prohibited | Prohibited |
| Pyrophoric liquids, organic, n.o.s. | 4.2 | UN2845 | I | Prohibited | Prohibited |
| Pyrophoric metals, n.o.s. <i>or</i> Pyrophoric alloys, n.o.s. | 4.2 | UN1383 | I | Prohibited | Prohibited |
| Pyrophoric solid, inorganic, n.o.s. | 4.2 | UN3200 | I | Prohibited | Prohibited |
| Pyrophoric solids, organic, n.o.s. | 4.2 | UN2846 | I | Prohibited | Prohibited |
| Pyrosulfuryl chloride | 8 | UN1817 | II | 8A | 8A |
| <i>Pyroxylin solution or solvent, see</i> Nitrocellulose | | | | | |
| Pyrrolidine | 3 | UN1922 | II | Prohibited | Prohibited |
| Q | | | | | |
| <i>Quebrachitol pentanitrate</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Quicklime, <i>see</i> Calcium oxide | | | | | |
| Quinoline | 6.1 | UN2656 | III | 6A | 6A |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| R | | | | | |
| <i>R 12, see Dichlorodifluoromethane</i> | | | | | |
| <i>R 12B1, see Chlorodifluorobromomethane</i> | | | | | |
| <i>R 13, see Chlorotrifluoromethane</i> | | | | | |
| <i>R 13B1, see Bromotrifluoromethane</i> | | | | | |
| <i>R 14, see Tetrafluoromethane</i> | | | | | |
| <i>R 21, see Dichlorofluoromethane</i> | | | | | |
| <i>R 22, see Chlorodifluoromethane</i> | | | | | |
| <i>R 114, see Dichlorotetrafluoroethane</i> | | | | | |
| <i>R 115, see Chloropentafluoroethane</i> | | | | | |
| <i>R 116, see Hexafluoroethane</i> | | | | | |
| <i>R 124, see Chlorotetrafluoroethane</i> | | | | | |
| <i>R 133a, see Chlorotrifluoroethane</i> | | | | | |
| <i>R 152a, see Difluoroethane</i> | | | | | |
| <i>R 500, see Dichlorodifluoromethane and difluoroethane, etc.</i> | | | | | |
| <i>R 502, see Chlorodifluoromethane and chloropentafluoroethane mixture, etc.</i> | | | | | |
| <i>R 503, see Chlorotrifluoromethane and trifluoromethane, etc.</i> | | | | | |
| Radioactive material, excepted package-articles manufactured from natural uranium or depleted uranium or natural thorium | 7 | UN2909 | n/a | Prohibited | 7A |
| Radioactive material, excepted package-empty packaging | 7 | UN2908 | n/a | Prohibited | Prohibited |
| Radioactive material, excepted package-instruments or articles | 7 | UN2911 | n/a | Prohibited | 7A |
| Radioactive material, excepted package-limited quantity of material | 7 | UN2910 | n/a | Prohibited | 7A |
| Radioactive material, low specific activity (LSA-I), <i>non fissile or fissile-excepted</i> . | 7 | UN2912 | n/a | Prohibited | Prohibited |
| Radioactive material, low specific activity (LSA-II), <i>non fissile or fissile-excepted</i> . | 7 | UN3321 | n/a | Prohibited | Prohibited |
| Radioactive material, low specific activity (LSA-III), <i>non fissile or fissile-excepted</i> . | 7 | UN3322 | n/a | Prohibited | Prohibited |
| Radioactive material, surface contaminated objects (SCO-I or SCO-II) <i>non fissile or fissile-excepted</i> | 7 | UN2913 | n/a | Prohibited | Prohibited |
| Radioactive material, transported under special arrangement, <i>non fissile or fissile excepted</i> | 7 | UN2919 | n/a | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Radioactive material, transported under special arrangement, fissile | 7 | UN3331 | n/a | Prohibited | Prohibited |
| Radioactive material, Type A package, fissile <i>non-special form</i> | 7 | UN3327 | n/a | Prohibited | Prohibited |
| Radioactive material, Type A package, fissile <i>non-special form, non fissile or fissile-excepted</i> | 7 | UN2915 | n/a | Prohibited | Prohibited |
| Radioactive material, Type A package, <i>non fissile or fissile-excepted</i> | 7 | UN3332 | n/a | Prohibited | Prohibited |
| Radioactive material, Type A package, special form, fissile | 7 | UN3333 | n/a | Prohibited | Prohibited |
| Radioactive material, Type B(M) package, fissile | 7 | UN3329 | n/a | Prohibited | Prohibited |
| Radioactive material, Type B(M) package non fissile or fissile-excepted | 7 | UN2917 | n/a | Prohibited | Prohibited |
| Radioactive material, Type B(U) package, fissile | 7 | UN3328 | n/a | Prohibited | Prohibited |
| Radioactive material, Type B(U) package <i>non fissile or fissile-excepted</i> | 7 | UN2916 | n/a | Prohibited | Prohibited |
| Radioactive material, uranium hexafluoride <i>nonfissile or fissile-excepted</i> | 7 | UN2978 | n/a | Prohibited | Prohibited |
| Radioactive material, uranium hexafluoride fissile | 7 | UN2977 | n/a | Prohibited | Prohibited |
| Rags, oily | 4.2 | UN1856 | III | Prohibited | Prohibited |
| <i>Railway torpedo, see Signals, railway track, explosive</i> | | | | | |
| <i>RC318, see Octafluorocyclobutane</i> | | | | | |
| RDX and cyclotetramethylenetetranitramine, wetted or desensitized see RDX and HMX mixtures, wetted or desensitized | | | | | |
| RDX and HMX mixtures, wetted <i>with not less than 15 percent water by mass or RDX and HMX mixtures, desensitized with not less than 10 percent phlegmatizer by mass</i> | 1.1D | UN0391 | II | Prohibited | Prohibited |
| RDX and Octogen mixtures, wetted or desensitized see RDX and HMX mixtures, wetted or desensitized, etc. | | | | | |
| <i>RDX, see Cyclotrimethylene trinitramine, etc.</i> | | | | | |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|------------------|---------------|------------|-----------------------|---------------------------|
| Receptacles, small, containing gas (gas cartridges) <i>flammable, without release device, not refillable and not exceeding 1 L capacity</i> | 2.1 | UN2037 | n/a | Prohibited | 2A |
| Receptacles, small, containing gas or gas cartridges (<i>nonflammable</i>) <i>without release device, not refillable and not exceeding 1 L capacity</i> | 2.2 | UN2037 | n/a | 2B | 2B |
| Receptacles, small, containing gas or gas cartridges (<i>oxidizing</i>) <i>without release device, not refillable and not exceeding 1 L capacity</i> | 2.2 | UN2037 | n/a | Prohibited | 2B |
| <i>Red phosphorus, see Phosphorus, amorphous</i> | | | | | |
| Refrigerant gas R 404A | 2.2 | UN3337 | n/a | 2B | 2B |
| Refrigerant gas R 407A | 2.2 | UN3338 | n/a | 2B | 2B |
| Refrigerant gas R 407B | 2.2 | UN3339 | n/a | 2B | 2B |
| Refrigerant gas R 407C | 2.2 | UN3340 | n/a | 2B | 2B |
| Refrigerant gases, n.o.s. | 2.2 | UN1078 | n/a | 2B | 2B |
| Refrigerant gases, n.o.s., or Dispersant gases, n.o.s. | 2.1 | NA1954 | n/a | Prohibited | 2A |
| Refrigerating machines, <i>containing flammable, non-toxic, liquified gas</i> | 2.1 | UN3358 | n/a | Prohibited | 2A |
| Refrigerating machines, <i>containing non-flammable, non-toxic, or ammonia solution (UN2672)</i> | 2.2 | UN2857 | n/a | 2B | 2B |
| Regulated medical waste (<i>sharps</i>), n.o.s. or Clinical waste, unspecified, n.o.s. or (BIO) Medical waste, n.o.s. or Biomedical waste, n.o.s. or Medical waste, n.o.s. | 6.2 | UN3291 | II | 6D | n/a |
| Regulated medical waste (<i>nonsharps</i>), n.o.s. or Clinical waste, unspecified, n.o.s. or (BIO) Medical waste, n.o.s. or Biomedical waste, n.o.s. or Medical waste, n.o.s. | 6.2 | UN3291 | II | 6E | n/a |
| Release devices, explosive | 1.4S | UN0173 | II | Prohibited | Prohibited |
| Resin solution, <i>flammable</i> | 3 | UN1866 | I, II, III | Prohibited | 3A |
| Resorcinol | 6.1 | UN2876 | III | 6A | 6A |
| <i>Rifle grenade, see Grenades, hand or rifle, etc.</i> | | | | | |
| <i>Rifle powder, see Powder, smokeless (UN0160)</i> | | | | | |
| Rivets, explosive | 1.4S | UN0174 | II | Prohibited | Prohibited |
| <i>Road asphalt or tar liquid, see Tars, liquid etc.</i> | | | | | |
| Rocket motors | 1.3C | UN0186 | II | Prohibited | Prohibited |
| Rocket motors | 1.1C | UN0280 | II | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|------------------|---------------|------------|-----------------------|---------------------------|
| Rocket motors | 1.2C | UN0281 | II | Prohibited | Prohibited |
| Rocket motors, liquid fueled | 1.2J | UN0395 | II | Prohibited | Prohibited |
| Rocket motors, liquid fueled | 1.3J | UN0396 | II | Prohibited | Prohibited |
| Rocket motors with hypergolic liquids <i>with or without an expelling charge</i> | 1.3L | UN0250 | II | Prohibited | Prohibited |
| Rocket motors with hypergolic liquids <i>with or without an expelling charge</i> | 1.2L | UN0322 | II | Prohibited | Prohibited |
| Rockets, line-throwing | 1.2G | UN0238 | II | Prohibited | Prohibited |
| Rockets, line-throwing | 1.3G | UN0240 | II | Prohibited | Prohibited |
| Rockets, line-throwing | 1.4G | UN0453 | II | Prohibited | Prohibited |
| Rockets, liquid fueled <i>with bursting charge</i> | 1.1J | UN0397 | II | Prohibited | Prohibited |
| Rockets, liquid fueled <i>with bursting charge</i> | 1.2J | UN0398 | II | Prohibited | Prohibited |
| Rockets, <i>with bursting charge</i> | 1.1E | UN0181 | II | Prohibited | Prohibited |
| Rockets, <i>with bursting charge</i> | 1.1F | UN0180 | II | Prohibited | Prohibited |
| Rockets, <i>with bursting charge</i> | 1.2E | UN0182 | II | Prohibited | Prohibited |
| Rockets, <i>with bursting charge</i> | 1.2F | UN0295 | II | Prohibited | Prohibited |
| Rockets, <i>with expelling charge</i> | 1.2C | UN0436 | II | Prohibited | Prohibited |
| Rockets, <i>with expelling charge</i> | 1.3C | UN0437 | II | Prohibited | Prohibited |
| Rockets, <i>with expelling charge</i> | 1.4C | UN0438 | II | Prohibited | Prohibited |
| Rockets, <i>with inert head</i> | 1.3C | UN0183 | II | Prohibited | Prohibited |
| Rockets, <i>with inert head</i> | 1.2C | UN0502 | n/a | Prohibited | Prohibited |
| Rosin oil | 3 | UN1286 | II, III | Prohibited | 3A |
| Rubber solution | 3 | UN1287 | II, III | Prohibited | 3A |
| Rubber scrap or shoddy, powdered or granulated, not exceeding 840 microns and rubber content exceeding 45 percent | 4.1 | UN1345 | II | Prohibited | Prohibited |
| Rubidium | 4.3 | UN1423 | I | Prohibited | Prohibited |
| Rubidium hydroxide | 8 | UN2678 | II | 8A | 8A |
| Rubidium hydroxide solution | 8 | UN2677 | II, III | 8A | 8A |
| S | | | | | |
| <i>Safety fuse, see Fuse, safety</i> | | | | | |
| Samples, explosive, <i>other than initiating explosives</i> | | UN0190 | II | Prohibited | Prohibited |
| <i>Sand acid, see Fluorosilicic acid</i> | | | | | |
| Seed cake <i>with more than 1.5 percent oil and not more than 11 percent moisture</i> | 4.2 | UN1386 | III | Prohibited | Prohibited |
| Seed cake <i>with not more than 1.5 percent oil and not more than 11 percent moisture</i> | 4.2 | UN2217 | III | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Seed cake, containing vegetable oil solvent extractions and expelled seeds, with not more than 10 percent of oil and when the amount of moisture is higher than 11 percent, with not more than 20 percent of oil and moisture combined | 4.2 | UN1386 | III | Prohibited | Prohibited |
| Selenates or Selenites | 6.1 | UN2630 | I | Prohibited | Prohibited |
| Selenic acid | 8 | UN1905 | I | Prohibited | Prohibited |
| Selenium compound, liquid, n.o.s. | 6.1 | UN3440 | I, II | Prohibited | Prohibited |
| Selenium compound, liquid, n.o.s. | 6.1 | UN3440 | III | 6A | 6A |
| Selenium compound, solid, n.o.s. | 6.1 | UN3283 | I, II | Prohibited | Prohibited |
| Selenium compound, solid, n.o.s. | 6.1 | UN3283 | III | 6A | 6A |
| Selenium disulfide | 6.1 | UN2657 | II | Prohibited | Prohibited |
| Selenium hexafluoride | 2.3 | UN2194 | | Prohibited | Prohibited |
| <i>Selenium nitride</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Selenium oxychloride | 8 | UN2879 | I | Prohibited | Prohibited |
| <i>Self-defense spray, aerosol, see Aerosols, etc.</i> | | | | | |
| Self-defense spray, non-pressurized | 9 | NA3334 | III | 9C | 9C |
| Self-heating liquid, corrosive, inorganic, n.o.s. | 4.2 | UN3188 | II, III | Prohibited | Prohibited |
| Self-heating liquid, corrosive, organic, n.o.s. | 4.2 | UN3185 | II, III | Prohibited | Prohibited |
| Self-heating liquid, inorganic, n.o.s. | 4.2 | UN3186 | II, III | Prohibited | Prohibited |
| Self-heating liquid, organic, n.o.s. | 4.2 | UN3183 | II, III | Prohibited | Prohibited |
| Self-heating liquid, toxic, inorganic, n.o.s. | 4.2 | UN3187 | II, III | Prohibited | Prohibited |
| Self-heating liquid, toxic, organic, n.o.s. | 4.2 | UN3184 | II, III | Prohibited | Prohibited |
| Self-heating solid, corrosive, inorganic, n.o.s. | 4.2 | UN3192 | II, III | Prohibited | Prohibited |
| Self-heating solid, corrosive, organic, n.o.s. | 4.2 | UN3126 | II, III | Prohibited | Prohibited |
| Self-heating solid, inorganic, n.o.s. | 4.2 | UN3190 | II, III | Prohibited | Prohibited |
| Self-heating solid, organic, n.o.s. | 4.2 | UN3088 | II, III | Prohibited | Prohibited |
| Self-heating solid, oxidizing, n.o.s. | 4.2 | UN3127 | n/a | Prohibited | Prohibited |
| Self-heating solid, toxic, inorganic, n.o.s. | 4.2 | UN3191 | II, III | Prohibited | Prohibited |
| Self-heating solid, toxic, organic, n.o.s. | 4.2 | UN3128 | II, III | Prohibited | Prohibited |
| <i>Self-propelled vehicle, see Engines etc. or Batteries etc.</i> | | | | | |
| Self-reactive liquid type B | 4.1 | UN3221 | II | Prohibited | Prohibited |
| Self-reactive liquid type B, temperature controlled | 4.1 | UN3231 | II | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|-------------------------|----------------------|-------------------|------------------------------|----------------------------------|
| Self-reactive liquid type C | 4.1 | UN3223 | II | Prohibited | Prohibited |
| Self-reactive liquid type C, temperature controlled | 4.1 | UN3233 | II | Prohibited | Prohibited |
| Self-reactive liquid type D | 4.1 | UN3225 | II | Prohibited | Prohibited |
| Self-reactive liquid type D, temperature controlled | 4.1 | UN3235 | II | Prohibited | Prohibited |
| Self-reactive liquid type E | 4.1 | UN3227 | II | Prohibited | Prohibited |
| Self-reactive liquid type E, temperature controlled | 4.1 | UN3237 | II | Prohibited | Prohibited |
| Self-reactive liquid type F | 4.1 | UN3229 | II | Prohibited | Prohibited |
| Self-reactive liquid type F, temperature controlled | 4.1 | UN3239 | II | Prohibited | Prohibited |
| Self-reactive solid type B | 4.1 | UN3222 | II | Prohibited | Prohibited |
| Self-reactive solid type B, temperature controlled | 4.1 | UN3232 | II | Prohibited | Prohibited |
| Self-reactive solid type C | 4.1 | UN3224 | II | Prohibited | Prohibited |
| Self-reactive solid type C, temperature controlled | 4.1 | UN3234 | II | Prohibited | Prohibited |
| Self-reactive solid type D | 4.1 | UN3226 | II | Prohibited | Prohibited |
| Self-reactive solid type D, temperature controlled | 4.1 | UN3236 | II | Prohibited | Prohibited |
| Self-reactive solid type E | 4.1 | UN3228 | II | Prohibited | Prohibited |
| Self-reactive solid type E, temperature controlled | 4.1 | UN3238 | II | Prohibited | Prohibited |
| Self-reactive solid type F | 4.1 | UN3230 | II | Prohibited | Prohibited |
| Self-reactive solid type F, temperature controlled | 4.1 | UN3240 | II | Prohibited | Prohibited |
| Shale Oil | 3 | UN1288 | I | Prohibited | Prohibited |
| Shale Oil | 3 | UN1288 | II, III | Prohibited | 3A |
| <i>Shaped charges, see Charges, shaped, etc.</i> | | | | | |
| Signal devices, hand | 1.4G | UN0191 | II | Prohibited | Prohibited |
| Signal devices, hand | 1.4S | UN0373 | II | Prohibited | Prohibited |
| Signals, distress, <i>ship</i> | 1.1G | UN0194 | II | Prohibited | Prohibited |
| Signals, distress, <i>ship</i> | 1.3G | UN0195 | II | Prohibited | Prohibited |
| Signals, distress, <i>ship</i> | 1.4G | UN0505 | n/a | Prohibited | Prohibited |
| Signals, distress, <i>ship</i> | 1.4S | UN0506 | n/a | Prohibited | Prohibited |
| <i>Signals, highway, see Signal devices, hand</i> | | | | | |
| Signals, railway track, explosive | 1.1G | UN0192 | II | Prohibited | Prohibited |
| Signals, railway track, explosive | 1.3G | UN0492 | II | Prohibited | Prohibited |
| Signals, railway track, explosive | 1.4G | UN0493 | II | Prohibited | Prohibited |
| Signals, railway track, explosive | 1.4S | UN0193 | II | Prohibited | Prohibited |
| <i>Signals, ship distress, water-activated, see Contrivances, water-activated, etc.</i> | | | | | |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Signals, smoke | 1.1G | UN0196 | II | Prohibited | Prohibited |
| Signals, smoke | 1.2G | UN0313 | II | Prohibited | Prohibited |
| Signals, smoke | 1.3G | UN0487 | II | Prohibited | Prohibited |
| Signals, smoke | 1.4G | UN0197 | II | Prohibited | Prohibited |
| Signals, smoke | 1.4S | UN0507 | n/a | Prohibited | Prohibited |
| Silane | 2.1 | UN2203 | n/a | Prohibited | Prohibited |
| <i>Silicofluoric acid, see Fluorosilicic acid</i> | | | | | |
| <i>Silicon chloride, see Silicon tetrachloride</i> | | | | | |
| Silicon powder, amorphous | 4.1 | UN1346 | III | Prohibited | Prohibited |
| Silicon tetrachloride | 8 | UN1818 | II | 8A | 8A |
| Silicon tetrafluoride, compressed | 2.3 | UN1859 | n/a | Prohibited | Prohibited |
| <i>Silver acetylide (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Silver arsenite | 6.1 | UN1683 | II | Prohibited | Prohibited |
| <i>Silver azide (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Silver chlorite (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Silver cyanide | 6.1 | UN1684 | II | Prohibited | Prohibited |
| <i>Silver fulminate (dry)</i> | Forbidden | | | Prohibited | Prohibited |
| Silver nitrate | 5.1 | UN1493 | II | 5A | 5A |
| <i>Silver oxalate (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Silver picrate (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Silver picrate, wetted with not less than 30 percent water, by mass | 4.1 | UN1347 | I | Prohibited | Prohibited |
| Sludge, acid | 8 | UN1906 | II | Prohibited | Prohibited |
| Smokeless powder for small arms (100 pounds or less) | 4.1 | NA3178 | I | Prohibited | Prohibited |
| Soda lime with more than 4 percent sodium hydroxide | 8 | UN1907 | III | 8A | 8A |
| Sodium | 4.3 | UN1428 | I | Prohibited | Prohibited |
| Sodium aluminate, solid | 8 | UN2812 | III | 8A | 8A |
| Sodium aluminate, solution | 8 | UN1819 | II, III | 8A | 8A |
| Sodium aluminum hydride | 4.3 | UN2835 | II | Prohibited | 4A |
| Sodium ammonium vanadate | 6.1 | UN2863 | II | Prohibited | Prohibited |
| Sodium arsanilate | 6.1 | UN2473 | III | 6A | 6A |
| Sodium arsenate | 6.1 | UN1685 | II | Prohibited | Prohibited |
| Sodium arsenite, aqueous solutions | 6.1 | UN1686 | II | Prohibited | Prohibited |
| Sodium arsenite, aqueous solutions | 6.1 | UN1686 | III | 6A | 6A |
| Sodium arsenite, solid | 6.1 | UN2027 | II | Prohibited | Prohibited |
| Sodium azide | 6.1 | UN1687 | II | Prohibited | Prohibited |
| <i>Sodium bifluoride, see Sodium hydrogendifluoride</i> | | | | | |
| <i>Sodium bisulfite, solution, see Bisulfites, aqueous solutions, n.o.s.</i> | | | | | |
| Sodium borohydride | 4.3 | UN1426 | I | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|------------------|---------------|------------|-----------------------|---------------------------|
| Sodium borohydride and sodium hydroxide solution, <i>with not more than 12 percent sodium borohydride and not more than 40 percent sodium hydroxide by mass</i> | 8 | UN3320 | II, III | Prohibited | Prohibited |
| Sodium bromate | 5.1 | UN1494 | II | 5A | 5A |
| Sodium cacodylate | 6.1 | UN1688 | II | Prohibited | Prohibited |
| Sodium carbonate peroxyhydrate | 5.1 | UN3378 | II, III | 5A | 5A |
| Sodium chlorate | 5.1 | UN1495 | II | 5A | 5A |
| Sodium chlorate, aqueous solution | 5.1 | UN2428 | II, III | 5A | 5A |
| <i>Sodium chlorate mixed with dinitrotoluene, see Explosive, blasting, type C</i> | | | | | |
| Sodium chlorite | 5.1 | UN1496 | II | Prohibited | Prohibited |
| Sodium chloroacetate | 6.1 | UN2659 | III | 6A | 6A |
| Sodium cuprocyanide, solid | 6.1 | UN2316 | I | Prohibited | Prohibited |
| Sodium cuprocyanide, solution | 6.1 | UN2317 | I | Prohibited | Prohibited |
| Sodium cyanide, solid | 6.1 | UN1689 | I | Prohibited | Prohibited |
| Sodium cyanide, solution | 6.1 | UN3414 | I, II | Prohibited | Prohibited |
| Sodium cyanide, solution | 6.1 | UN3414 | III | Prohibited | 6A |
| <i>Sodium dichloroisocyanurate or Sodium dichloro-s-triazinetriene, see Dichloroisocyanuric acid etc.</i> | | | | | |
| Sodium dinitro-o-cresolate, <i>dry or wetted with less than 15 percent water, by mass</i> | 1.3C | UN0234 | II | Prohibited | Prohibited |
| Sodium dinitro-o-cresolate, <i>wetted with not less than 10 percent water, by mass</i> | 4.1 | UN3369 | I | Prohibited | Prohibited |
| Sodium dinitro-o-cresolate, <i>wetted with not less than 15 percent water, by mass</i> | 4.1 | UN1348 | I | Prohibited | Prohibited |
| Sodium dithionite or Sodium hydrosulfite | 4.2 | UN1384 | II | Prohibited | Prohibited |
| Sodium fluoride, solid | 6.1 | UN1690 | III | 6A | 6A |
| Sodium fluoride, solution | 6.1 | UN3415 | III | 6A | 6A |
| Sodium fluoroacetate | 6.1 | UN2629 | I | Prohibited | Prohibited |
| Sodium fluorosilicate | 6.1 | UN2674 | III | 6A | 6A |
| <i>Sodium hydrate, see Sodium hydroxide, solid</i> | | | | | |
| Sodium hydride | 4.3 | UN1427 | I | Prohibited | Prohibited |
| Sodium hydrogendifluoride | 8 | UN2439 | II | 8A | 8A |
| Sodium hydrosulfide, <i>with less than 25 percent water of crystallization</i> | 4.2 | UN2318 | II | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Sodium hydrosulfide, <i>with not less than 25 percent water of crystallization</i> | 8 | UN2949 | II | Prohibited | Prohibited |
| Sodium hydrosulfite, <i>see</i> Sodium dithionite | | | | | |
| Sodium hydroxide, solid | 8 | UN1823 | II | 8A | 8A |
| Sodium hydroxide solution | 8 | UN1824 | II, III | 8A | 8A |
| <i>Sodium hypochlorite, solution, see</i> Hypochlorite solutions | | | | | |
| <i>Sodium metal, liquid alloy, see</i> Alkali metal alloys, liquid, n.o.s. | | | | | |
| Sodium methylate | 4.2 | UN1431 | II | Prohibited | Prohibited |
| Sodium methylate solutions <i>in alcohol</i> | 3 | UN1289 | II | Prohibited | Prohibited |
| Sodium methylate solutions <i>in alcohol</i> | 3 | UN1289 | III | Prohibited | 3A |
| Sodium monoxide | 8 | UN1825 | II | 8A | 8A |
| Sodium nitrate | 5.1 | UN1498 | III | 5A | 5A |
| Sodium nitrate and potassium nitrate mixtures | 5.1 | UN1499 | III | 5A | 5A |
| Sodium nitrite | 5.1 | UN1500 | III | 5A | 5A |
| Sodium pentachlorophenate | 6.1 | UN2567 | II | Prohibited | Prohibited |
| Sodium perborate monohydrate | 5.1 | UN3377 | III | 5A | 5A |
| Sodium perchlorate | 5.1 | UN1502 | II | 5A | 5A |
| Sodium permanganate | 5.1 | UN1503 | II | 5A | 5A |
| Sodium peroxide | 5.1 | UN1504 | I | Prohibited | Prohibited |
| Sodium peroxoborate, anhydrous | 5.1 | UN3247 | II | 5A | 5A |
| Sodium persulfate | 5.1 | UN1505 | III | 5A | 5A |
| Sodium phosphide | 4.3 | UN1432 | I | Prohibited | 4A |
| Sodium picramate, <i>dry or wetted with less than 20 percent water, by mass</i> | 1.3C | UN0235 | II | Prohibited | Prohibited |
| Sodium picramate, <i>wetted with not less than 20 percent water, by mass</i> | 4.1 | UN1349 | I | Prohibited | Prohibited |
| <i>Sodium picryl peroxide</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Sodium potassium alloys, see</i> Potassium sodium alloys | | | | | |
| <i>Sodium selenate, see</i> Selenates or Selenites | | | | | |
| Sodium sulfide, anhydrous <i>or</i> Sodium sulfide <i>with less than 30 percent water of crystallization</i> | 4.2 | UN1385 | II | Prohibited | Prohibited |
| Sodium sulfide, hydrated <i>with not less than 30 percent water</i> | 8 | UN1849 | II | Prohibited | Prohibited |
| Sodium superoxide | 5.1 | UN2547 | I | Prohibited | Prohibited |
| <i>Sodium tetranitride</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Solids containing corrosive liquid, n.o.s. | 8 | UN3244 | II | 8A | 8A |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|------------------|---------------|------------|-----------------------|---------------------------|
| Solids containing flammable liquid, n.o.s. | 4.1 | UN3175 | II | Prohibited | 4A |
| Solids containing toxic liquid, n.o.s. | 6.1 | UN3243 | II | Prohibited | Prohibited |
| Sounding devices, explosive | 1.1D | UN0374 | II | Prohibited | Prohibited |
| Sounding devices, explosive | 1.1F | UN0296 | II | Prohibited | Prohibited |
| Sounding devices, explosive | 1.2D | UN0375 | II | Prohibited | Prohibited |
| Sounding devices, explosive | 1.2F | UN0204 | II | Prohibited | Prohibited |
| <i>Spirits of salt, see Hydrochloric acid</i> | | | | | |
| <i>Squibs, see Igniters</i> | | | | | |
| Stannic chloride, anhydrous | 8 | UN1827 | II | 8A | 8A |
| Stannic chloride, pentahydrate | 8 | UN2440 | III | 8A | 8A |
| Stannic phosphide | 4.3 | UN1433 | I | Prohibited | Prohibited |
| <i>Steel swarf, see Ferrous metal borings, etc.</i> | | | | | |
| Stibine | 2.3 | UN2676 | n/a | Prohibited | Prohibited |
| <i>Storage batteries, wet, see Batteries, wet etc.</i> | | | | | |
| Strontium arsenite | 6.1 | UN1691 | II | Prohibited | Prohibited |
| Strontium chlorate | 5.1 | UN1506 | II | 5A | 5A |
| Strontium nitrate | 5.1 | UN1507 | III | 5A | 5A |
| Strontium perchlorate | 5.1 | UN1508 | II | 5A | 5A |
| Strontium peroxide | 5.1 | UN1509 | II | 5A | 5A |
| Strontium phosphide | 4.3 | UN2013 | I | Prohibited | Prohibited |
| Strychnine or Strychnine salts | 6.1 | UN1692 | I | Prohibited | Prohibited |
| <i>Stryphnic acid, see Trinitroresorcinol, etc.</i> | | | | | |
| Styrene monomer, stabilized | 3 | UN2055 | III | Prohibited | 3A |
| Substances, explosive, n.o.s. | 1.1A | UN0473 | II | Prohibited | Prohibited |
| Substances, explosive, n.o.s. | 1.1C | UN0474 | II | Prohibited | Prohibited |
| Substances, explosive, n.o.s. | 1.1D | UN0475 | II | Prohibited | Prohibited |
| Substances, explosive, n.o.s. | 1.1G | UN0476 | II | Prohibited | Prohibited |
| Substances, explosive, n.o.s. | 1.1L | UN0357 | II | Prohibited | Prohibited |
| Substances, explosive, n.o.s. | 1.2L | UN0358 | II | Prohibited | Prohibited |
| Substances, explosive, n.o.s. | 1.3C | UN0477 | II | Prohibited | Prohibited |
| Substances, explosive, n.o.s. | 1.3G | UN0478 | II | Prohibited | Prohibited |
| Substances, explosive, n.o.s. | 1.3L | UN0359 | II | Prohibited | Prohibited |
| Substances, explosive, n.o.s. | 1.4C | UN0479 | II | Prohibited | Prohibited |
| Substances, explosive, n.o.s. | 1.4D | UN0480 | II | Prohibited | Prohibited |
| Substances, explosive, n.o.s. | 1.4G | UN0485 | II | Prohibited | Prohibited |
| Substances, explosive, n.o.s. | 1.4S | UN0481 | II | Prohibited | Prohibited |
| Substances, explosive, very insensitive, n.o.s., or Substances, EVI, n.o.s. | 1.5D | UN0482 | II | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|------------------|---------------|------------|-----------------------|---------------------------|
| Substituted nitrophenol pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i> | 3 | UN2780 | I, II | Prohibited | Prohibited |
| Substituted nitrophenol pesticides, liquid, toxic | 6.1 | UN3014 | I, II | Prohibited | Prohibited |
| Substituted nitrophenol pesticides, liquid, toxic | 6.1 | UN3014 | III | 6A | 6A |
| Substituted nitrophenol pesticides, liquid, toxic flammable <i>flashpoint not less than 23° C</i> | 6.1 | UN3013 | I, II | Prohibited | Prohibited |
| Substituted nitrophenol pesticides, liquid, toxic flammable <i>flashpoint not less than 23° C</i> | 6.1 | UN3013 | III | 6A | 6A |
| Substituted nitrophenol pesticides, solid, toxic | 6.1 | UN2779 | I, II | Prohibited | Prohibited |
| Substituted nitrophenol pesticides, solid, toxic | 6.1 | UN2779 | III | 6A | 6A |
| <i>Sucrose octanitrate (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Sulfamic acid | 8 | UN2967 | III | 8A | 8A |
| Sulfur | 9 | NA1350 | III | Prohibited | Prohibited |
| Sulfur | 4.1 | UN1350 | III | Prohibited | Prohibited |
| <i>Sulfur and chlorate, loose mixtures of</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Sulfur chlorides | 8 | UN1828 | I | Prohibited | Prohibited |
| <i>Sulfur dichloride, see Sulfur chlorides</i> | | | | | |
| Sulfur dioxide | 2.3 | UN1079 | n/a | Prohibited | Prohibited |
| <i>Sulfur dioxide solution, see Sulfurous acid</i> | | | | | |
| Sulfur hexafluoride | 2.2 | UN1080 | n/a | 2B | 2B |
| Sulfur, molten | 9 | NA2448 | III | Prohibited | Prohibited |
| Sulfur, molten | 4.1 | UN2448 | III | Prohibited | Prohibited |
| Sulfur tetrafluoride | 2.3 | UN2418 | n/a | Prohibited | Prohibited |
| Sulfur trioxide, stabilized | 8 | UN1829 | I | Prohibited | Prohibited |
| <i>Sulfuretted hydrogen, see Hydrogen sulfide</i> | | | | | |
| Sulfuric acid with more than 51 percent acid | 8 | UN1830 | II | Prohibited | Prohibited |
| Sulfuric acid with not more than 51 percent acid | 8 | UN2796 | II | 8A | 8A |
| Sulfuric acid, fuming with 30 percent or more free sulfur trioxide | 8 | UN1831 | I | Prohibited | Prohibited |
| Sulfuric acid, fuming with less than 30 percent free sulfur trioxide | 8 | UN1831 | I | Prohibited | Prohibited |
| Sulfuric acid, spent | 8 | UN1832 | II | Prohibited | Prohibited |
| Sulfuric and hydrofluoric acid mixtures, see Hydrofluoric and sulfuric acid mixtures | | | | | |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|------------------|---------------|------------|-----------------------|---------------------------|
| <i>Sulfuric anhydride, see Sulfur trioxide, inhibited</i> | | | | | |
| Sulfurous acid | 8 | UN1833 | II | 8A | 8A |
| Sulfuryl chloride | 8 | UN1834 | I | Prohibited | Prohibited |
| Sulfuryl fluoride | 2.3 | UN2191 | n/a | Prohibited | Prohibited |
| T | | | | | |
| Tars, liquid <i>including road oils and cutback, bitumens</i> | 3 | UN1999 | II, III | Prohibited | 3A |
| Tear gas candles | 6.1 | UN1700 | II | Prohibited | Prohibited |
| <i>Tear gas cartridges, see Ammunition, tearproducing, etc.</i> | | | | | |
| Tear gas devices <i>with more than 2 percent tear gas substances, by mass</i> | 6.1 | NA1693 | I, II | Prohibited | Prohibited |
| <i>Tear gas devices with not more than 2 percent tear gas substances, by mass, see Aerosols, etc.</i> | | | | | |
| <i>Tear gas grenades, see Tear gas candles</i> | | | | | |
| Tear gas substances, liquid, n.o.s. | 6.1 | UN1693 | I, II | Prohibited | Prohibited |
| Tear gas substances, solid, n.o.s. | 6.1 | UN3448 | I, II | Prohibited | Prohibited |
| Tellurium compound, n.o.s. | 6.1 | UN3284 | I, II | Prohibited | Prohibited |
| Tellurium compound, n.o.s. | 6.1 | UN3284 | III | 6A | 6A |
| Tellurium hexafluoride | 2.3 | UN2195 | n/a | Prohibited | Prohibited |
| Terpene hydrocarbons, n.o.s. | 3 | UN2319 | III | Prohibited | 3A |
| Terpinolene | 3 | UN2541 | III | Prohibited | 3A |
| <i>Tetraazido benzene quinone</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Tetrabromoethane | 6.1 | UN2504 | III | 6A | 6A |
| 1,1,2,2-Tetrachloroethane | 6.1 | UN1702 | II | Prohibited | Prohibited |
| Tetrachloroethylene | 6.1 | UN1897 | III | 6A | 6A |
| Tetraethyl dithiopyrophosphate | 6.1 | UN1704 | II | Prohibited | Prohibited |
| Tetraethyl silicate | 3 | UN1292 | III | Prohibited | 3A |
| <i>Tetraethylammonium perchlorate (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Tetraethylenepentamine | 8 | UN2320 | III | 8A | 8A |
| 1,1,1,2-Tetrafluoroethane or Refrigerant gas R 134a | 2.2 | UN3159 | n/a | 2B | 2B |
| Tetrafluoroethylene, stabilized | 2.1 | UN1081 | n/a | Prohibited | 2A |
| Tetrafluoromethane or Refrigerant gas R 14 | 2.2 | UN1982 | n/a | Prohibited | Prohibited |
| 1,2,3,6-Tetrahydrobenzaldehyde | 3 | UN2498 | III | Prohibited | 3A |
| Tetrahydrofuran | 3 | UN2056 | II | Prohibited | Prohibited |
| Tetrahydrofurfurylamine | 3 | UN2943 | III | Prohibited | 3A |
| Tetrahydrophthalic anhydrides <i>with more than 0.05 percent of maleic anhydride</i> | 8 | UN2698 | III | 8A | 8A |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| 1,2,3,6-Tetrahydropyridine | 3 | UN2410 | II | Prohibited | 3A |
| Tetrahydrothiophene | 3 | UN2412 | II | Prohibited | 3A |
| Tetramethylammonium hydroxide, solid | 8 | UN3423 | II | 8A | 8A |
| Tetramethylammonium hydroxide, solution | 8 | UN1835 | II | 8A | 8A |
| <i>Tetramethylene diperoxide dicarbamide</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Tetramethylsilane | 3 | UN2749 | I | Prohibited | Prohibited |
| <i>Tetranitro diglycerin</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Tetranitroaniline | 1.1D | UN0207 | II | Prohibited | Prohibited |
| Tetranitromethane | 5.1 | UN1510 | I | Prohibited | Prohibited |
| <i>2,3,4,6-Tetranitrophenol</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>2,3,4,6-Tetranitrophenyl methyl nitramine</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>2,3,4,6-Tetranitrophenylnitramine</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Tetranitroresorcinol (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>2,3,5,6-Tetranitroso nitrobenzene (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>2,3,5,6-Tetranitroso-1,4-dinitrobenzene</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Tetrapropylorthotitanate | 3 | UN2413 | III | Prohibited | 3A |
| Tetrazene, see Guanyl nitrosaminoguanyltetrazene | | | | | |
| <i>Tetrazine (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Tetrazol-1-acetic acid | 1.4C | UN0407 | II | Prohibited | Prohibited |
| 1H-Tetrazole | 1.1D | UN0504 | n/a | Prohibited | Prohibited |
| <i>Tetrazolyl azide (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Tetryl, see Trinitrophenylmethylnitramine | | | | | |
| Textile waste, wet | 4.2 | UN1857 | III | Prohibited | Prohibited |
| Thallium chlorate | 5.1 | UN2573 | II | Prohibited | Prohibited |
| Thallium compounds, n.o.s. | 6.1 | UN1707 | II | Prohibited | Prohibited |
| Thallium nitrate | 6.1 | UN2727 | II | Prohibited | Prohibited |
| 4-Thiapentanal | 6.1 | UN2785 | III | 6A | 6A |
| Thioacetic acid | 3 | UN2436 | II | Prohibited | 3A |
| Thiocarbamate pesticide, liquid, flammable, toxic, <i>flashpoint less than 23° C</i> | 3 | UN2772 | I, II | Prohibited | Prohibited |
| Thiocarbamate pesticide, liquid, toxic | 6.1 | UN3006 | I, II | Prohibited | Prohibited |
| Thiocarbamate pesticide, liquid, toxic | 6.1 | UN3006 | III | 6A | 6A |
| Thiocarbamate pesticides, liquid, flammable, toxic, <i>flashpoint not less than 23°C</i> | 6.1 | UN3005 | I, II | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Thiocarbamate pesticides, liquid, flammable, toxic, <i>flashpoint not less than 23° C</i> | 6.1 | UN3005 | III | 6A | 6A |
| Thiocarbamate pesticides, solid, toxic | 6.1 | UN2771 | I, II | Prohibited | Prohibited |
| Thiocarbamate pesticides, solid, toxic | 6.1 | UN2771 | III | 6A | 6A |
| <i>Thiocarbonylchloride</i> , see Thiophosgene | | | | | |
| Thioglycol | 6.1 | UN2966 | II | Prohibited | Prohibited |
| Thioglycolic acid | 8 | UN1940 | II | 8A | 8A |
| Thiolactic acid | 6.1 | UN2936 | II | Prohibited | Prohibited |
| Thionyl chloride | 8 | UN1836 | I | Prohibited | Prohibited |
| Thiophene | 3 | UN2414 | II | Prohibited | 3A |
| Thiophosgene | 6.1 | UN2474 | II | Prohibited | Prohibited |
| Thiophosphoryl chloride | 8 | UN1837 | II | Prohibited | Prohibited |
| Thiourea dioxide | 4.2 | UN3341 | II, III | Prohibited | Prohibited |
| <i>Tin chloride, fuming</i> , see Stannic chloride, anhydrous | | | | | |
| <i>Tin perchloride or Tin tetrachloride</i> , see Stannic chloride, anhydrous | | | | | |
| Tinctures, medicinal | 3 | UN1293 | II, III | Prohibited | 3A |
| <i>Tinning flux</i> , see Zinc chloride | | | | | |
| Tires and tire assemblies, see Air compressed or Nitrogen, compressed | | | | | |
| Titanium disulphide | 4.2 | UN3174 | III | Prohibited | Prohibited |
| Titanium hydride | 4.1 | UN1871 | II | Prohibited | Prohibited |
| Titanium powder, dry | 4.2 | UN2546 | I, II, III | Prohibited | Prohibited |
| Titanium powder, wetted <i>with not less than 25 percent water (a visible excess of water must be present) (a) mechanically produced, particle size less than 53 microns; (b) chemically produced, particle size less than 840 microns</i> | 4.1 | UN1352 | II | Prohibited | Prohibited |
| Titanium sponge granules or Titanium sponge powders | 4.1 | UN2878 | III | Prohibited | Prohibited |
| Titanium tetrachloride | 8 | UN1838 | II | Prohibited | Prohibited |
| Titanium trichloride mixtures | 8 | UN2869 | II, III | 8A | 8A |
| Titanium trichloride, pyrophoric or Titanium trichloride mixtures, pyrophoric | 4.2 | UN2441 | I | Prohibited | Prohibited |
| <i>TNT mixed with aluminum</i> , see Tritonal | | | | | |
| TNT, see Trinitrotoluene, etc. | | | | | |
| Toluene | 3 | UN1294 | II | Prohibited | 3A |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|-------------------------|----------------------|-------------------|------------------------------|----------------------------------|
| Toluene diisocyanate | 6.1 | UN2078 | II | Prohibited | Prohibited |
| <i>Toluene sulfonic acid, see Alkyl, or Aryl sulfonic acid, etc.</i> | | | | | |
| Toluidines <i>liquid</i> | 6.1 | UN1708 | II | Prohibited | Prohibited |
| Toluidines <i>solid</i> | 6.1 | UN3451 | II | Prohibited | Prohibited |
| 2,4-Toluylenediamine, solid or 2,4-Toluenediamine, solid | 6.1 | UN1709 | III | 6A | 6A |
| 2,4-Toluylenediamine, solution or 2,4-Toluenediamine, solution | 6.1 | UN3418 | III | 6A | 6A |
| Torpedoes <i>with bursting charge</i> | 1.1D | UN0451 | II | Prohibited | Prohibited |
| Torpedoes <i>with bursting charge</i> | 1.1E | UN0329 | II | Prohibited | Prohibited |
| Torpedoes <i>with bursting charge</i> | 1.1F | UN0330 | II | Prohibited | Prohibited |
| Torpedoes, liquid fueled, <i>with inert head</i> | 1.3J | UN0450 | II | Prohibited | Prohibited |
| Torpedoes, liquid fueled, <i>with or without bursting charge</i> | 1.1J | UN0449 | II | Prohibited | Prohibited |
| Toxic by inhalation liquid, flammable, corrosive, n.o.s. <i>with an LC50 lower than or equal to 200 ml/ m3 and saturated vapor concentration greater than or equal to 500 LC50</i> | 6.1 | UN3488 | I | Prohibited | Prohibited |
| Toxic by inhalation liquid, flammable, corrosive, n.o.s. <i>with an LC50 lower than or equal to 1000 ml/ m3 and saturated vapor concentration greater than or equal to 10 LC50</i> | 6.1 | UN3489 | I | Prohibited | Prohibited |
| Toxic by inhalation liquid, n.o.s. <i>with an LC50 lower than or equal to 200 ml/m3 and saturated vapor concentration greater than or equal to 500 LC50</i> | 6.1 | UN3381 | I | Prohibited | Prohibited |
| Toxic by inhalation liquid, n.o.s. <i>with an LC50 lower than or equal to 1000 ml/m3 and saturated vapor concentration greater than or equal to 10 LC50</i> | 6.1 | UN3382 | I | Prohibited | Prohibited |
| Toxic by inhalation liquid, flammable, n.o.s. <i>with an LC50 lower than or equal to 200 ml/m3 and saturated vapor concentration greater than or equal to 500 LC50</i> | 6.1 | UN3383 | I | Prohibited | Prohibited |
| Toxic by inhalation liquid, flammable, n.o.s. <i>with an LC50 lower than or equal to 1000 ml/m3 and saturated vapor concentration greater than or equal to 10 LC50</i> | 6.1 | UN3384 | I | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|-------------------------|----------------------|-------------------|------------------------------|----------------------------------|
| Toxic by inhalation liquid, water-reactive, flammable, n.o.s. with an LC50 lower than or equal to 200 ml/m3 and saturated vapor concentration greater than or equal to 500 LC50- | 6.1 | UN3490 | I | Prohibited | Prohibited |
| Toxic by inhalation liquid, water-reactive, flammable, n.o.s. with an LC50 lower than or equal to 1000 ml/m3 and saturated vapor concentration greater than or equal to 10 LC50- | 6.1 | UN3491 | I | Prohibited | Prohibited |
| Toxic by inhalation liquid, water-reactive, n.o.s. with an LC50 lower than or equal to 200 ml/m3 and saturated vapor concentration greater than or equal to 500 LC50 | 6.1 | UN3385 | I | Prohibited | Prohibited |
| Toxic by inhalation liquid, water-reactive, n.o.s. with an LC50 lower than or equal to 1000 ml/m3 and saturated vapor concentration greater than or equal to 10 LC50 | 6.1 | UN3386 | I | Prohibited | Prohibited |
| Toxic by inhalation liquid, oxidizing, n.o.s. with an LC50 lower than or equal to 200 ml/m3 and saturated vapor concentration greater than or equal to 500 LC50 | 6.1 | UN3387 | I | Prohibited | Prohibited |
| Toxic by inhalation liquid, oxidizing, n.o.s. with an LC50 lower than or equal to 1000 ml/m3 and saturated vapor concentration greater than or equal to 10 LC50 | 6.1 | UN3388 | I | Prohibited | Prohibited |
| Toxic by inhalation liquid, corrosive, n.o.s. with an LC50 lower than or equal to 200 ml/m3 and saturated vapor concentration greater than or equal to 500 LC50 | 6.1 | UN3389 | I | Prohibited | Prohibited |
| Toxic by inhalation liquid, corrosive, n.o.s. with an LC50 lower than or equal to 1000 ml/m3 and saturated vapor concentration greater than or equal to 10 LC50 | 6.1 | UN3390 | I | Prohibited | Prohibited |
| Toxic liquid, corrosive, inorganic, n.o.s. | 6.1 | UN3289 | I, II | Prohibited | Prohibited |
| Toxic liquid, inorganic, n.o.s. | 6.1 | UN3287 | I, II | Prohibited | Prohibited |
| Toxic liquid, inorganic, n.o.s. | 6.1 | UN3287 | III | 6A | 6A |
| Toxic liquids, corrosive, organic, n.o.s. | 6.1 | UN2927 | I, II | Prohibited | Prohibited |
| Toxic liquids, flammable, organic, n.o.s. | 6.1 | UN2929 | I, II | Prohibited | Prohibited |
| Toxic, liquids, organic, n.o.s. | 6.1 | UN2810 | I, II | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Toxic, liquids, organic, n.o.s. | 6.1 | UN2810 | III | 6A | 6A |
| Toxic liquids, oxidizing, n.o.s. | 6.1 | UN3122 | I, II | Prohibited | Prohibited |
| Toxic liquids, water-reactive, n.o.s. | 6.1 | UN3123 | I, II | Prohibited | Prohibited |
| Toxic solid, corrosive, inorganic, n.o.s. | 6.1 | UN3290 | I, II | Prohibited | Prohibited |
| Toxic solid, inorganic, n.o.s. | 6.1 | UN3288 | I, II | Prohibited | Prohibited |
| Toxic solid, inorganic, n.o.s. | 6.1 | UN3288 | III | 6A | 6A |
| Toxic solids, corrosive, organic, n.o.s. | 6.1 | UN2928 | I, II | Prohibited | Prohibited |
| Toxic solids, flammable, organic, n.o.s. | 6.1 | UN2930 | I, II | Prohibited | Prohibited |
| Toxic solids, organic, n.o.s. | 6.1 | UN2811 | I, II | Prohibited | Prohibited |
| Toxic solids, organic, n.o.s. | 6.1 | UN2811 | III | 6A | 6A |
| Toxic solids, oxidizing, n.o.s. | 6.1 | UN3086 | I, II | Prohibited | Prohibited |
| Toxic solids, self-heating, n.o.s. | 6.1 | UN3124 | I, II | Prohibited | Prohibited |
| Toxic solids, water-reactive, n.o.s. | 6.1 | UN3125 | I, II | Prohibited | Prohibited |
| Toxins, extracted from living sources, liquid, n.o.s. | 6.1 | UN3172 | I, II | Prohibited | Prohibited |
| Toxins, extracted from living sources, liquid, n.o.s. | 6.1 | UN3172 | III | 6A | 6A |
| Toxins, extracted from living sources, solid, n.o.s. | 6.1 | UN3462 | I, II | Prohibited | Prohibited |
| Toxins, extracted from living sources, solid, n.o.s. | 6.1 | UN3462 | III | 6A | 6A |
| Toy caps | 1.4S | NA0337 | II | Prohibited | Prohibited |
| Tracers for ammunition | 1.3G | UN0212 | II | Prohibited | Prohibited |
| Tracers for ammunition | 1.4G | UN0306 | II | Prohibited | Prohibited |
| <i>Tractors, see Vehicle, etc.</i> | | | | | |
| <i>Tri-(b-nitroxyethyl) ammonium nitrate</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Triallyl borate | 6.1 | UN2609 | III | 6A | 6A |
| Triallylamine | 3 | UN2610 | III | Prohibited | Prohibited |
| Triazine pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i> | 3 | UN2764 | I, II | Prohibited | Prohibited |
| Triazine pesticides, liquid, toxic | 6.1 | UN2998 | I, II | Prohibited | Prohibited |
| Triazine pesticides, liquid, toxic | 6.1 | UN2998 | III | 6A | 6A |
| Triazine pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i> | 6.1 | UN2997 | I, II | Prohibited | Prohibited |
| Triazine pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i> | 6.1 | UN2997 | III | 6A | 6A |
| Triazine pesticides, solid, toxic | 6.1 | UN2763 | I, II | Prohibited | Prohibited |
| Triazine pesticides, solid, toxic | 6.1 | UN2763 | III | 6A | 6A |
| Tributylamine | 6.1 | UN2542 | II | Prohibited | Prohibited |
| Tributylphosphane | 4.2 | UN3254 | I | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|------------------|---------------|------------|-----------------------|---------------------------|
| <i>Trichloro-s-triazinetriene dry, with more than 39 percent available chlorine, see Trichloroisocyanuric acid, dry</i> | | | | | |
| Trichloroacetic acid | 8 | UN1839 | II | 8A | 8A |
| Trichloroacetic acid, solution | 8 | UN2564 | II, III | 8A | 8A |
| Trichloroacetyl chloride | 8 | UN2442 | II | Prohibited | Prohibited |
| Trichlorobenzenes, liquid | 6.1 | UN2321 | III | 6A | 6A |
| Trichlorobutene | 6.1 | UN2322 | II | Prohibited | Prohibited |
| 1,1,1-Trichloroethane | 6.1 | UN2831 | III | 6A | 6A |
| Trichloroethylene | 6.1 | UN1710 | III | 6A | 6A |
| Trichloroisocyanuric acid, dry | 5.1 | UN2468 | II | 5A | 5A |
| <i>Trichloromethyl perchlorate</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Trichlorosilane | 4.3 | UN1295 | I | Prohibited | Prohibited |
| Tricresyl phosphate with more than 3 percent ortho isomer | 6.1 | UN2574 | II | Prohibited | Prohibited |
| Triethyl phosphite | 3 | UN2323 | III | Prohibited | 3A |
| Triethylamine | 3 | UN1296 | II | Prohibited | Prohibited |
| Triethylenetetramine | 8 | UN2259 | II | 8A | 8A |
| Trifluoroacetic acid | 8 | UN2699 | I | Prohibited | Prohibited |
| Trifluoroacetyl chloride | 2.3 | UN3057 | n/a | Prohibited | Prohibited |
| Trifluorochloroethylene, stabilized | 2.3 | UN1082 | n/a | Prohibited | Prohibited |
| 1,1,1-Trifluoroethane, compressed or Refrigerant gas R 143a | 2.1 | UN2035 | n/a | Prohibited | 2A |
| Trifluoromethane or Refrigerant gas R 23 | 2.2 | UN1984 | n/a | 2B | 2B |
| Trifluoromethane, refrigerated liquid | 2.2 | UN3136 | n/a | 2B | 2B |
| 2-Trifluoromethylaniline | 6.1 | UN2942 | III | 6A | 6A |
| 3-Trifluoromethylaniline | 6.1 | UN2948 | II | Prohibited | Prohibited |
| <i>Triformoxime trinitrate</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Triisobutylene | 3 | UN2324 | III | Prohibited | 3A |
| Triisopropyl borate | 3 | UN2616 | II, III | Prohibited | 3A |
| Trimethoxysilane | 6.1 | NA9269 | I | Prohibited | Prohibited |
| Trimethyl borate | 3 | UN2416 | II | Prohibited | 3A |
| Trimethyl phosphite | 3 | UN2329 | III | Prohibited | 3A |
| <i>1,3,5-Trimethyl-2,4,6-trinitrobenzene</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Trimethylacetyl chloride | 6.1 | UN2438 | I | Prohibited | Prohibited |
| Trimethylamine, anhydrous | 2.1 | UN1083 | n/a | Prohibited | 2A |
| Trimethylamine, aqueous solutions with not more than 50 percent trimethylamine by mass | 3 | UN1297 | I, II | Prohibited | Prohibited |
| Trimethylamine, aqueous solutions with not more than 50 percent trimethylamine by mass | 3 | UN1297 | III | Prohibited | 3A |
| 1,3,5-Trimethylbenzene | 3 | UN2325 | III | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Trimethylchlorosilane | 3 | UN1298 | II | Prohibited | Prohibited |
| Trimethylcyclohexylamine | 8 | UN2326 | III | 8A | 8A |
| <i>Trimethylene glycol diperchlorate</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Trimethylhexamethylene diisocyanate | 6.1 | UN2328 | III | 6A | 6A |
| Trimethylhexamethylenediamines | 8 | UN2327 | III | 8A | 8A |
| <i>Trimethylol nitromethane trinitrate</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Trinitro-m-cresol | 1.1D | UN0216 | II | Prohibited | Prohibited |
| <i>2,4,6-Trinitro-1,3,5-triazido benzene (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>2,4,6-Trinitro-1,3-diazobenzene</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Trinitroacetic acid</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Trinitroacetoneitrile</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Trinitroamine cobalt</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Trinitroaniline or Picramide | 1.1D | UN0153 | II | Prohibited | Prohibited |
| Trinitroanisole | 1.1D | UN0213 | II | Prohibited | Prohibited |
| Trinitrobenzene, wetted, with not less than 10 percent water, by mass | 4.1 | UN3367 | I | Prohibited | Prohibited |
| Trinitrobenzene, dry or wetted with less than 30 percent water, by mass | 1.1D | UN0214 | II | Prohibited | Prohibited |
| Trinitrobenzenesulfonic acid | 1.1D | UN0386 | II | Prohibited | Prohibited |
| Trinitrobenzoic acid, dry or wetted with less than 30 percent water, by mass | 1.1D | UN0215 | II | Prohibited | Prohibited |
| Trinitrobenzoic acid, wetted with not less than 10 percent water, by mass | 4.4 | UN3368 | I | Prohibited | Prohibited |
| Trinitrobenzoic acid, wetted with not less than 30 percent water, by mass | 4.1 | UN1355 | I | Prohibited | Prohibited |
| Trinitrochlorobenzene or Picryl chloride | 1.1D | UN0155 | II | Prohibited | Prohibited |
| Trinitrochlorobenzene (picryl chloride), wetted, with not less than 10 percent water by mass | 4.1 | UN3365 | I | Prohibited | Prohibited |
| <i>Trinitroethanol</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Trinitroethylnitrate</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Trinitrofluorenone | 1.1D | UN0387 | II | Prohibited | Prohibited |
| <i>Trinitromethane</i> | Forbidden | | | Prohibited | Prohibited |
| Trinitronaphthalene | 1.1D | UN0217 | II | Prohibited | Prohibited |
| <i>1,3,5-Trinitronaphthalene</i> | Forbidden | | | Prohibited | Prohibited |
| Trinitrophenetole | 1.1D | UN0218 | II | Prohibited | Prohibited |
| Trinitrophenol (picric acid), wetted with not less than 10 percent water by mass | 4.1 | UN3364 | I | Prohibited | Prohibited |
| Trinitrophenol or Picric acid, dry or wetted with less than 30 percent water, by mass | 1.1D | UN0154 | II | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|--|------------------|---------------|------------|-----------------------|---------------------------|
| Trinitrophenol, wetted <i>with not less than 30 percent water, by mass</i> | 4.1 | UN1344 | I | Prohibited | Prohibited |
| <i>2,4,6-Trinitrophenyl guanidine (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>2,4,6-Trinitrophenyl nitramine</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>2,4,6-Trinitrophenyl trimethylol methyl nitramine trinitrate (dry)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Trinitrophenylmethyl nitramine or Tetryl | 1.1D | UN0208 | II | Prohibited | Prohibited |
| Trinitroresorcinol or Styphnic acid, dry or wetted with less than 20 percent water, or mixture of alcohol and water, by mass | 1.1D | UN0219 | II | Prohibited | Prohibited |
| Trinitroresorcinol, wetted or Styphnic acid, wetted <i>with not less than 20 percent water, or mixture of alcohol and water, by mass</i> | 1.1D | UN0394 | II | Prohibited | Prohibited |
| <i>2,4,6-Trinitroso-3-methyl nitraminoanisole</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| <i>Trinitrotetramine cobalt nitrate</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Trinitrotoluene or TNT, dry or wetted <i>with less than 30 percent water, by mass</i> | 1.1D | UN0209 | II | Prohibited | Prohibited |
| Trinitrotoluene (TNT) wetted, with not less than 10 percent water by mass | 4.1 | UN3366 | I | Prohibited | Prohibited |
| Trinitrotoluene and Trinitrobenzene mixtures or TNT and trinitrobenzene mixtures or TNT and hexanitrostilbene mixtures or Trinitrotoluene and hexanitrostilbene mixtures | 1.1D | UN0388 | II | Prohibited | Prohibited |
| Trinitrotoluene mixtures containing Trinitrobenzene and Hexanitrostilbene or TNT mixtures containing trinitrobenzene and hexanitrostilbene | 1.1D | UN0389 | II | Prohibited | Prohibited |
| Trinitrotoluene wetted <i>with not less than 30 percent water, by mass</i> | 4.1 | UN1356 | I | Prohibited | Prohibited |
| Tripropylamine | 3 | UN2260 | III | Prohibited | 3A |
| Tripropylene | 3 | UN2057 | II, III | Prohibited | 3A |
| <i>Tris, bis-bifluoroamino diethoxy propane (TVOPA)</i> | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Tris-(1-aziridinyl)phosphine oxide, solution | 6.1 | UN2501 | II | Prohibited | Prohibited |
| Tris-(1-aziridinyl)phosphine oxide, solution | 6.1 | UN2501 | III | 6A | 6A |
| Tritonal | 1.1D | UN0390 | II | Prohibited | Prohibited |
| Tungsten hexafluoride | 2.3 | UN2196 | n/a | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|------------------|---------------|------------|-----------------------|---------------------------|
| Turpentine | 3 | UN1299 | III | Prohibited | 3A |
| Turpentine substitute | 3 | UN1300 | I | Prohibited | Prohibited |
| Turpentine substitute | 3 | UN1300 | II, III | Prohibited | 3A |
| U | | | | | |
| Undecane | 3 | UN2330 | III | Prohibited | 3A |
| Urea hydrogen peroxide | 5.1 | UN1511 | III | 5A | 5A |
| Urea nitrate, <i>dry or wetted with less than 20 percent water, by mass</i> | 1.1D | UN0220 | II | Prohibited | Prohibited |
| Urea nitrate, <i>wetted with not less than 10 percent water, by mass</i> | 4.1 | UN3370 | I | Prohibited | Prohibited |
| Urea nitrate, <i>wetted with not less than 20 percent water, by mass</i> | 4.1 | UN1357 | I | Prohibited | Prohibited |
| Urea peroxide, <i>see</i> Urea hydrogen peroxide | | | | | |
| V | | | | | |
| Valeraldehyde | 3 | UN2058 | II | Prohibited | 3A |
| Valeric acid, <i>see</i> Corrosive liquids, n.o.s. | | | | | |
| Valeryl chloride | 8 | UN2502 | II | 8A | 8A |
| Vanadium compound, n.o.s. | 6.1 | UN3285 | I, II | | |
| Vanadium compound, n.o.s. | 6.1 | UN3285 | III | 6A | 6A |
| Vanadium oxytrichloride | 8 | UN2443 | II | 8A | 8A |
| Vanadium pentoxide, <i>non-fused form</i> | 6.1 | UN2862 | III | 6A | 6A |
| Vanadium tetrachloride | 8 | UN2444 | I | Prohibited | Prohibited |
| Vanadium trichloride | 8 | UN2475 | III | 8A | 8A |
| Vanadyl sulfate | 6.1 | UN2931 | II | Prohibited | Prohibited |
| Vehicle, flammable gas powered <i>or</i> Vehicle, fuel cell, flammable gas powered | 9 | UN3166 | n/a | Prohibited | Prohibited |
| Vehicle, flammable liquid powered <i>or</i> Vehicle, fuel cell, flammable liquid powered | 9 | UN3166 | n/a | Prohibited | Prohibited |
| Very signal cartridge, <i>see</i> Cartridges, signal | | | | | |
| Vinyl acetate, stabilized | 3 | UN1301 | II | Prohibited | 3A |
| Vinyl bromide, stabilized | 2.1 | UN1085 | n/a | Prohibited | 2A |
| Vinyl butyrate, stabilized | 3 | UN2838 | II | Prohibited | 3A |
| Vinyl chloride, stabilized | 2.1 | UN1086 | n/a | Prohibited | 2A |
| Vinyl chloroacetate | 6.1 | UN2589 | II | Prohibited | Prohibited |
| Vinyl ethyl ether, stabilized | 3 | UN1302 | I | Prohibited | Prohibited |
| Vinyl fluoride, stabilized | 2.1 | UN1860 | n/a | Prohibited | 2A |
| Vinyl isobutyl ether, stabilized | 3 | UN1304 | II | Prohibited | 3A |
| Vinyl methyl ether, stabilized | 2.1 | UN1087 | n/a | Prohibited | 2A |
| Vinyl nitrate polymer | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Vinylidene chloride, stabilized | 3 | UN1303 | I | Prohibited | 3A |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|------------------|---------------|------------|-----------------------|---------------------------|
| Vinylpyridines, stabilized | 6.1 | UN3073 | II | Prohibited | Prohibited |
| Vinyltoluenes, stabilized | 3 | UN2618 | III | Prohibited | 3A |
| Vinyltrichlorosilane, stabilized | 3 | UN1305 | I | Prohibited | Prohibited |
| W | | | | | |
| Warheads, rocket with burster or expelling charge | 1.4D | UN0370 | II | Prohibited | Prohibited |
| Warheads, rocket with burster or expelling charge | 1.4F | UN0371 | II | Prohibited | Prohibited |
| Warheads, rocket with bursting charge | 1.1D | UN0286 | II | Prohibited | Prohibited |
| Warheads, rocket with bursting charge | 1.1F | UN0369 | II | Prohibited | Prohibited |
| Warheads, rocket with bursting charge | 1.2D | UN0287 | II | Prohibited | Prohibited |
| Warheads, torpedo with bursting charge | 1.1D | UN0221 | II | Prohibited | Prohibited |
| Water-reactive liquid, corrosive, n.o.s. | 4.3 | UN3129 | I | Prohibited | Prohibited |
| Water-reactive liquid, corrosive, n.o.s. | 4.3 | UN3129 | II, III | Prohibited | 4A |
| Water-reactive liquid, n.o.s. | 4.3 | UN3148 | I, II, III | Prohibited | Prohibited |
| Water-reactive liquid, toxic, n.o.s. | 4.3 | UN3130 | I, II, III | Prohibited | Prohibited |
| Water-reactive solid, corrosive, n.o.s. | 4.3 | UN3131 | I | Prohibited | Prohibited |
| Water-reactive solid, corrosive, n.o.s. | 4.3 | UN3131 | II, III | Prohibited | 4A |
| Water-reactive solid, flammable, n.o.s. | 4.3 | UN3132 | I | Prohibited | Prohibited |
| Water-reactive solid, flammable, n.o.s. | 4.3 | UN3132 | II, III | Prohibited | 4A |
| Water-reactive solid, n.o.s. | 4.3 | UN2813 | I | Prohibited | Prohibited |
| Water-reactive solid, n.o.s. | 4.3 | UN2813 | II, III | Prohibited | 4A |
| Water-reactive solid, oxidizing, n.o.s. | 4.3 | UN3133 | II, III | Prohibited | Prohibited |
| Water-reactive solid, self-heating, n.o.s. | 4.3 | UN3135 | I, II, III | Prohibited | Prohibited |
| Water-reactive solid, toxic, n.o.s. | 4.3 | UN3134 | I | Prohibited | Prohibited |
| Water-reactive solid, toxic, n.o.s. | 4.3 | UN3134 | II, III | Prohibited | 4A |
| Wheel chair, electric, see Battery powered vehicle or Battery powered equipment | | | | | |
| White acid, see Hydrofluoric acid | | | | | |
| White asbestos (chrysotile, actinolite, anthophyllite, tremolite) | 9 | UN2590 | III | Prohibited | 9C |
| Wood preservatives, liquid | 3 | UN1306 | II, III | Prohibited | 3A |
| Wool waste, wet | 4.2 | UN1387 | III | Prohibited | Prohibited |
| X | | | | | |
| Xanthates | 4.2 | UN3342 | II, III | Prohibited | Prohibited |
| Xenon, compressed | 2.2 | UN2036 | n/a | 2B | 2B |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|------------------|---------------|------------|-----------------------|---------------------------|
| Xenon, refrigerated liquid (<i>cryogenic liquids</i>) | 2.2 | UN2591 | n/a | Prohibited | Prohibited |
| Xylenes | 3 | UN1307 | II, III | Prohibited | Prohibited |
| Xylenols, solid | 6.1 | UN2261 | II | Prohibited | Prohibited |
| Xylenols, liquid | 6.1 | UN3430 | II | Prohibited | Prohibited |
| Xylidines, solid | 6.1 | UN3452 | II | Prohibited | Prohibited |
| Xylidines, liquid | 6.1 | UN1711 | II | Prohibited | Prohibited |
| Xylol bromide, liquid | 6.1 | UN1701 | II | Prohibited | Prohibited |
| Xylol bromide, solid | 6.1 | UN3417 | II | Prohibited | Prohibited |
| <i>p</i> -Xylol diazide | Forbidden | Prohibited | Prohibited | Prohibited | Prohibited |
| Z | | | | | |
| Zinc ammonium nitrite | 5.1 | UN1512 | II | Prohibited | Prohibited |
| Zinc arsenate or Zinc arsenite or Zinc arsenate and zinc arsenite mixtures | 6.1 | UN1712 | II | Prohibited | Prohibited |
| Zinc ashes | 4.3 | UN1435 | III | Prohibited | 4A |
| <i>Zinc bisulfite solution, see Bisulfites, aqueous solutions, n.o.s.</i> | | | | | |
| Zinc bromate | 5.1 | UN2469 | III | 5A | 5A |
| Zinc chlorate | 5.1 | UN1513 | II | 5A | 5A |
| Zinc chloride, anhydrous | 8 | UN2331 | III | Prohibited | Prohibited |
| Zinc chloride, solution | 8 | UN1840 | III | 8A | 8A |
| Zinc cyanide | 6.1 | UN1713 | I | Prohibited | Prohibited |
| Zinc dithionite or Zinc hydrosulfite | 9 | UN1931 | III | Prohibited | 9C |
| Zinc fluorosilicate | 6.1 | UN2855 | III | 6A | 6A |
| Zinc hydrosulfite, <i>see</i> Zinc dithionite | | | | | |
| <i>Zinc muriate solution, see Zinc chloride, solution</i> | | | | | |
| Zinc nitrate | 5.1 | UN1514 | II | 5A | 5A |
| Zinc permanganate | 5.1 | UN1515 | II | 5A | 5A |
| Zinc peroxide | 5.1 | UN1516 | II | 5A | 5A |
| Zinc phosphide | 4.3 | UN1714 | I | Prohibited | Prohibited |
| Zinc powder or Zinc dust | 4.3 | UN1436 | I, II, III | Prohibited | Prohibited |
| Zinc resinate | 4.1 | UN2714 | III | Prohibited | 4A |
| <i>Zinc selenate, see Selenates or Selenites</i> | | | | | |
| <i>Zinc selenite, see Selenates or Selenites</i> | | | | | |
| <i>Zinc silicofluoride, see Zinc fluorosilicate</i> | | | | | |
| Zirconium, dry, <i>coiled wire, finished metal sheets, strip (thinner than 254 microns but not thinner than 18 microns)</i> | 4.1 | UN2858 | III | Prohibited | 4A |
| Zirconium, dry, <i>finished sheets, strip or coiled wire</i> | 4.2 | UN2009 | III | Prohibited | Prohibited |

| Hazardous Materials Descriptions and Proper Shipping Names (a) | Hazard Class (b) | ID Number (c) | DOT PG (d) | Domestic Mail Air (e) | Domestic Mail Surface (f) |
|---|-------------------------|----------------------|-------------------|------------------------------|----------------------------------|
| Zirconium hydride | 4.1 | UN1437 | II | Prohibited | Prohibited |
| Zirconium nitrate | 5.1 | UN2728 | III | 5A | 5A |
| Zirconium picramate, <i>dry or wetted with less than 20 percent water, by mass</i> | 1.3C | UN0236 | II | Prohibited | Prohibited |
| Zirconium picramate, <i>wetted with not less than 20 percent water, by mass</i> | 4.1 | UN1517 | I | Prohibited | Prohibited |
| Zirconium powder, dry | 4.2 | UN2008 | I, II, III | Prohibited | Prohibited |
| Zirconium powder, <i>wetted with not less than 25 percent water (a visible excess of water must be present) (a) mechanically produced, particle size less than 53 microns; (b) chemically produced, particle size less than 840 microns</i> | 4.1 | UN1358 | II | Prohibited | Prohibited |
| Zirconium scrap | 4.2 | UN1932 | III | Prohibited | Prohibited |
| Zirconium suspended in a liquid | 3 | UN1308 | I, II | Prohibited | Prohibited |
| Zirconium suspended in a liquid | 3 | UN1308 | III | Prohibited | 3A |
| Zirconium tetrachloride | 8 | UN2503 | III | 8A | 8A |

Appendix B

Numerical Listing of Proper Shipping Names by Identification (ID) Number

This appendix contains a numerical list of the United Nations (UN) and North American (NA) identification (ID) numbers for proper shipping names of the hazardous materials listed alphabetically in Appendix [A](#). The text appearing in *italic* type is not part of the proper shipping name of the hazardous material and is used for descriptive or references purposes only. This numerical list can be used to determine the proper shipping name of a hazardous material when the UN or NA number is known. Once the proper shipping name is known, it can be referenced back to Appendix [A](#) to determine the mailability of the hazardous material.

| | |
|--------|---|
| UN0004 | Ammonium picrate, <i>dry or wetted with less than 10 percent water, by mass</i> |
| UN0005 | Cartridges for weapons, <i>with bursting charge</i> |
| UN0006 | Cartridges for weapons, <i>with bursting charge</i> |
| UN0007 | Cartridges for weapons, <i>with bursting charge</i> |
| UN0009 | Ammunition, incendiary <i>with or without burster, expelling charge, or propelling charge</i> |
| UN0010 | Ammunition, incendiary <i>with or without burster, expelling charge, or propelling charge</i> |
| UN0012 | Cartridges for weapons, inert projectile or Cartridges, small arms |
| UN0014 | Cartridges for weapons, blank or Cartridges, small arms, blank |
| UN0015 | Ammunition, smoke, <i>with or without burster, expelling charge, or propelling charge</i> |
| UN0016 | Ammunition, smoke, <i>with or without burster, expelling charge, or propelling charge</i> |
| UN0018 | Ammunition, tear-producing <i>with burster, expelling charge, or propelling charge</i> |
| UN0019 | Ammunition, tear-producing <i>with burster, expelling charge, or propelling charge</i> |
| UN0020 | Ammunition, toxic <i>with burster, expelling charge, or propelling charge</i> |
| UN0021 | Ammunition, toxic <i>with burster, expelling charge, or propelling charge</i> |
| NA0027 | Black powder for small arms |
| UN0027 | Black powder or Gunpowder, <i>granular or as a meal</i> |
| UN0028 | Black powder, compressed or Gunpowder, compressed or Black powder, in pellets or Gunpowder, in pellets |
| UN0029 | Detonators, non-electric, <i>for blasting</i> |
| UN0030 | Detonators, electric, <i>for blasting</i> |
| UN0033 | Bombs, <i>with bursting charge</i> |
| UN0034 | Bombs, <i>with bursting charge</i> |
| UN0035 | Bombs, <i>with bursting charge</i> |
| UN0037 | Bombs, photo-flash |
| UN0038 | Bombs, photo-flash |
| UN0039 | Bombs, photo-flash |
| UN0042 | Boosters, <i>without detonator</i> |
| UN0043 | Bursters, <i>explosive</i> |
| UN0044 | Primers, cap type |
| UN0048 | Charges, demolition |
| UN0049 | Cartridges, flash |
| UN0050 | Cartridges, flash |
| UN0054 | Cartridges, signal |
| UN0055 | Cases, cartridge, empty with primer |
| UN0056 | Charges, depth |
| UN0059 | Charges, shaped, <i>without detonator</i> |
| UN0060 | Charges, supplementary explosive |
| UN0065 | Cord, detonating, <i>flexible</i> |
| UN0066 | Cord, igniter |
| UN0070 | Cutters, cable, explosive |
| UN0072 | Cyclotrimethylenetrinitramine, wetted or Cyclonite, wetted or Hexogen, wetted or RDX, wetted <i>with not less than 15 percent water by mass</i> |
| UN0073 | Detonators for ammunition |
| UN0074 | Diazodinitrophenol, wetted <i>with not less than 40 percent water or mixture of alcohol and water, by mass</i> |

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| UN0075 | Diethyleneglycol dinitrate, desensitized <i>with not less than 25 percent non-volatile water-insoluble phlegmatizer, by mass</i> |
| UN0076 | Dinitrophenol, <i>dry or wetted with less than 15 percent water, by mass</i> |
| UN0077 | Dinitrophenolates <i>alkali metals, dry or wetted with less than 15 percent water, by mass</i> |
| UN0078 | Dinitroresorcinol, <i>dry or wetted with less than 15 percent water, by mass</i> |
| UN0079 | Hexanitrodiphenylamine or Dipicrylamine or Hexyl |
| UN0081 | Explosive, blasting, type A |
| UN0082 | Explosive, blasting, type B |
| UN0083 | Explosive, blasting, type C |
| UN0084 | Explosive, blasting, type D |
| UN0092 | Flares, surface |
| UN0093 | Flares, aerial |
| UN0094 | Flash powder |
| UN0099 | Fracturing devices, explosives, <i>without detonators for oil wells</i> |
| UN0101 | Fuse, non-detonating (<i>instantaneous or quickmatch</i>) |
| UN0102 | Cord detonating or Fuse detonating metal clad |
| UN0103 | Fuse, igniter <i>tubular metal clad</i> |
| UN0104 | Cord, detonating, mild effect or Fuse, detonating, mild effect <i>metal clad</i> |
| UN0105 | Fuse, safety |
| UN0106 | Fuzes, detonating |
| UN0107 | Fuzes, detonating |
| UN0110 | Grenades, practice, <i>hand or rifle</i> |
| UN0113 | Guanyl nitrosaminoguanylidene hydrazine, wetted <i>with not less than 30 percent water, by mass</i> |
| UN0114 | Guanyl nitrosaminoguanyltetrazene, wetted or Tetrazene, wetted <i>with not less than 30 percent water or mixture of alcohol and water, by mass</i> |
| UN0118 | Hexolite, or Hexotol dry or wetted <i>with less than 15 percent water, by mass</i> |
| UN0121 | Igniters |
| NA0124 | Jet, perforating guns, charged <i>oil well, with detonator</i> |
| UN0124 | Jet, perforating guns, charged <i>oil well, without detonator</i> |
| UN0129 | Lead azide, wetted <i>with not less than 20 percent water or mixture of alcohol and water, by mass</i> |
| UN0130 | Lead styphnate, wetted or Lead trinitroresorcinate, wetted <i>with not less than 20 percent water or mixture of alcohol and water, by mass</i> |
| UN0131 | Lighters, fuse |
| UN0132 | Deflagrating metal salts of aromatic nitroderivatives, n.o.s. |
| UN0133 | Mannitol hexanitrate, wetted or Nitromannite, wetted <i>with not less than 40 percent water, or mixture of alcohol and water, by mass</i> |
| UN0135 | Mercury fulminate, wetted <i>with not less than 20 percent water, or mixture of alcohol and water, by mass</i> |
| UN0136 | Mines <i>with bursting charge</i> |
| UN0137 | Mines <i>with bursting charge</i> |
| UN0138 | Mines <i>with bursting charge</i> |
| UN0143 | Nitroglycerin, desensitized <i>with not less than 40 percent non-volatile water insoluble phlegmatizer, by mass</i> |
| UN0144 | Nitroglycerin, solution in alcohol, <i>with more than 1 percent but not more than 10 percent nitroglycerin</i> |
| UN0146 | Nitrostarch, <i>dry or wetted with less than 20 percent water, by mass</i> |
| UN0147 | Nitro urea |

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| UN0150 | Pentaerythrite tetranitrate, wetted or Pentaerythritol tetranitrate, wetted or PETN, wetted with not less than 25 percent water, by mass, or Pentaerythrite tetranitrate, or Pentaerythritol tetranitrate, or PETN, desensitized with not less than 15 percent |
| UN0151 | Pentolite, dry or wetted with less than 15 percent water, by mass |
| UN0153 | Trinitroaniline or Picramide |
| UN0154 | Trinitrophenol or Picric acid, dry or wetted with less than 30 percent water, by mass |
| UN0155 | Trinitrochlorobenzene or Picryl chloride |
| UN0159 | Powder cake, wetted or Powder paste, wetted with not less than 25 percent water, by mass |
| UN0160 | Powder, smokeless |
| UN0161 | Powder, smokeless |
| UN0167 | Projectiles, with bursting charge |
| UN0168 | Projectiles, with bursting charge |
| UN0169 | Projectiles, with bursting charge |
| UN0171 | Ammunition, illuminating with or without burster, expelling charge, or propelling charge |
| UN0173 | Release devices, explosive |
| UN0174 | Rivets, explosive |
| UN0180 | Rockets, with bursting charge |
| UN0181 | Rockets, with bursting charge |
| UN0182 | Rockets, with bursting charge |
| UN0183 | Rockets, with inert head |
| UN0186 | Rocket motors |
| UN0190 | Samples, explosive, other than initiating explosives |
| UN0191 | Signal devices, hand |
| UN0192 | Signals, railway track, explosive |
| UN0193 | Signals, railway track, explosive |
| UN0194 | Signals, distress, ship |
| UN0195 | Signals, distress, ship |
| UN0196 | Signals, smoke |
| UN0197 | Signals, smoke |
| UN0204 | Sounding devices, explosive |
| UN0207 | Tetranitroaniline |
| UN0208 | Trinitrophenylmethylnitramine or Tetryl |
| UN0209 | Trinitrotoluene or TNT, dry or wetted with less than 30 percent water, by mass |
| UN0212 | Tracers for ammunition |
| UN0213 | Trinitroanisole |
| UN0214 | Trinitrobenzene, dry or wetted with less than 30 percent water, by mass |
| UN0215 | Trinitrobenzoic acid, dry or wetted with less than 30 percent water, by mass |
| UN0216 | Trinitro-meta-cresol |
| UN0217 | Trinitronaphthalene |
| UN0218 | Trinitrophenetole |
| UN0219 | Trinitroresorcinol or Styphnic acid, dry or wetted with less than 20 percent water, or mixture of alcohol and water, by mass |
| UN0220 | Urea nitrate, dry or wetted with less than 20 percent water, by mass |
| UN0221 | Warheads, torpedo with bursting charge |
| UN0222 | Ammonium nitrate, with more than 0.2 percent combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance |
| UN0224 | Barium azide, dry or wetted with less than 50 percent water, by mass |

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|--------|---|
| UN0225 | Boosters with detonator |
| UN0226 | Cyclotetramethylenetetranitramine, wetted or HMX, wetted or Octogen, wetted <i>with not less than 15 percent water, by mass</i> |
| UN0234 | Sodium dinitro- <i>o</i> -cresolate, <i>dry or wetted with less than 15 percent water, by mass</i> |
| UN0235 | Sodium picramate, <i>dry or wetted with less than 20 percent water, by mass</i> |
| UN0236 | Zirconium picramate, <i>dry or wetted with less than 20 percent water, by mass</i> |
| UN0237 | Charges, shaped, flexible, linear |
| UN0238 | Rockets, line-throwing |
| UN0240 | Rockets, line-throwing |
| UN0241 | Explosive, blasting, type E |
| UN0242 | Charges, propelling, for cannon |
| UN0243 | Ammunition, incendiary, white phosphorus, <i>with burster, expelling charge, or propelling charge</i> |
| UN0244 | Ammunition, incendiary, white phosphorus, <i>with burster, expelling charge, or propelling charge</i> |
| UN0245 | Ammunition smoke, white phosphorus <i>with burster, expelling charge, or propelling charge</i> |
| UN0246 | Ammunition, smoke, white phosphorus <i>with burster, expelling charge, or propelling charge</i> |
| UN0247 | Ammunition, incendiary <i>liquid or gel, with burster, expelling charge, or propelling charge</i> |
| UN0248 | Contrivances, water-activated, <i>with burster, expelling charge, or propelling charge</i> |
| UN0249 | Contrivances, water-activated, <i>with burster, expelling charge, or propelling charge</i> |
| UN0250 | Rocket motors with hypergolic liquids <i>with or without an expelling charge</i> |
| UN0254 | Ammunition, illuminating <i>with or without burster, expelling charge, or propelling charge</i> |
| UN0255 | Detonators, electric, for blasting |
| UN0257 | Fuzes, detonating |
| UN0266 | Octolite or Octol, <i>dry or wetted with less than 15 percent water, by mass</i> |
| UN0267 | Detonators, non-electric, <i>for blasting</i> |
| UN0268 | Boosters with detonator |
| UN0271 | Charges, propelling |
| UN0272 | Charges, propelling |
| UN0275 | Cartridges, power device |
| NA0276 | Model rocket motor |
| UN0276 | Cartridges, power device |
| UN0277 | Cartridges, oil well |
| UN0278 | Cartridges, oil well |
| UN0279 | Charges, propelling, for cannon |
| UN0280 | Rocket motors |
| UN0281 | Rocket motors |
| UN0282 | Nitroguanidine or Picrite, <i>dry or wetted with less than 20 percent water, by mass</i> |
| UN0283 | Boosters, <i>without detonator</i> |
| UN0284 | Grenades, <i>hand or rifle, with bursting charge</i> |
| UN0285 | Grenades, <i>hand or rifle, with bursting charge</i> |
| UN0286 | Warheads, rocket <i>with bursting charge</i> |
| UN0287 | Warheads, rocket <i>with bursting charge</i> |
| UN0288 | Charges, shaped, flexible, linear |
| UN0289 | Cord, detonating, <i>flexible</i> |
| UN0290 | Cord, detonating or Fuse, detonating <i>metal clad</i> |
| UN0291 | Bombs, <i>with bursting charge</i> |
| UN0292 | Grenades, <i>hand or rifle, with bursting charge</i> |

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| UN0293 | Grenades, <i>hand or rifle, with bursting charge</i> |
| UN0294 | Mines <i>with bursting charge</i> |
| UN0295 | Rockets, <i>with bursting charge</i> |
| UN0296 | Sounding devices, explosive |
| UN0297 | Ammunition, illuminating <i>with or without burster, expelling charge, or propelling charge</i> |
| UN0299 | Bombs, photo-flash |
| UN0300 | Ammunition, incendiary <i>with or without burster, expelling charge, or propelling charge</i> |
| UN0301 | Ammunition, tear-producing <i>with burster, expelling charge, or propelling charge</i> |
| UN0303 | Ammunition, smoke, <i>with or without burster, expelling charge, or propelling charge</i> |
| UN0305 | Flash powder |
| UN0306 | Tracers for ammunition |
| UN0312 | Cartridges, signal |
| UN0313 | Signals, smoke |
| UN0314 | Igniters |
| UN0315 | Igniters |
| UN0316 | Fuzes, igniting |
| UN0317 | Fuzes, igniting |
| UN0318 | Grenades, practice, <i>hand or rifle</i> |
| UN0319 | Primers, tubular |
| UN0320 | Primers, tubular |
| UN0321 | Cartridges for weapons, <i>with bursting charge</i> |
| UN0322 | Rocket motors with hypergolic liquids <i>with or without an expelling charge</i> |
| NA0323 | Model rocket motor |
| UN0323 | Cartridges, power device |
| UN0324 | Projectiles, <i>with bursting charge</i> |
| UN0325 | Igniters |
| UN0326 | Cartridges for weapons, blank |
| UN0327 | Cartridges for weapons, blank <i>or</i> Cartridges, small arms, blank |
| UN0328 | Cartridges for weapons, inert projectile |
| UN0329 | Torpedoes <i>with bursting charge</i> |
| UN0330 | Torpedoes <i>with bursting charge</i> |
| NA0331 | Ammonium nitrate–fuel oil mixture containing only prilled ammonium nitrate and fuel oil |
| UN0331 | Explosive, blasting, type B <i>or</i> Agent blasting, Type B |
| UN0332 | Explosive, blasting, type E <i>or</i> Agent blasting, Type E |
| UN0333 | Fireworks |
| UN0334 | Fireworks |
| UN0335 | Fireworks |
| UN0336 | Fireworks |
| NA0337 | Toy caps |
| UN0337 | Fireworks |
| UN0338 | Cartridges for weapons, blank <i>or</i> Cartridges, small arms, blank |
| UN0339 | Cartridges for weapons, inert projectile <i>or</i> Cartridges, small arms |
| UN0340 | Nitrocellulose, <i>dry or wetted with less than 25 percent water (or alcohol), by mass</i> |
| UN0341 | Nitrocellulose, <i>unmodified or plasticized with less than 18 percent plasticizing substance, by mass</i> |
| UN0342 | Nitrocellulose, <i>wetted with not less than 25 percent alcohol, by mass</i> |
| UN0343 | Nitrocellulose, <i>plasticized with not less than 18 percent plasticizing substance, by mass</i> |

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| UN0344 | Projectiles, <i>with bursting charge</i> |
| UN0345 | Projectiles, <i>inert with tracer</i> |
| UN0346 | Projectiles, <i>with burster or expelling charge</i> |
| UN0347 | Projectiles, <i>with burster or expelling charge</i> |
| UN0348 | Cartridges for weapons, <i>with bursting charge</i> |
| NA0349 | Grenades, empty primed |
| UN0349 | Articles, explosive, n.o.s. |
| UN0350 | Articles, explosive, n.o.s. |
| UN0351 | Articles, explosive, n.o.s. |
| UN0352 | Articles, explosive, n.o.s. |
| UN0353 | Articles, explosive, n.o.s. |
| UN0354 | Articles, explosive, n.o.s. |
| UN0355 | Articles, explosive, n.o.s. |
| UN0356 | Articles, explosive, n.o.s. |
| UN0357 | Substances, explosive, n.o.s. |
| UN0358 | Substances, explosive, n.o.s. |
| UN0359 | Substances, explosive, n.o.s. |
| UN0360 | Detonator assemblies, non–electric <i>for blasting</i> |
| UN0361 | Detonator assemblies, non–electric <i>for blasting</i> |
| UN0362 | Ammunition, practice |
| UN0363 | Ammunition, proof |
| UN0364 | Detonators for ammunition |
| UN0365 | Detonators for ammunition |
| UN0366 | Detonators for ammunition |
| UN0367 | Fuzes, detonating |
| UN0368 | Fuzes, igniting |
| UN0369 | Warheads, rocket <i>with bursting charge</i> |
| UN0370 | Warheads, rocket <i>with burster or expelling charge</i> |
| UN0371 | Warheads, rocket <i>with burster or expelling charge</i> |
| UN0372 | Grenades, practice, <i>hand or rifle</i> |
| UN0373 | Signal devices, hand |
| UN0374 | Sounding devices, explosive |
| UN0375 | Sounding devices, explosive |
| UN0376 | Primers, tubular |
| UN0377 | Primers, cap type |
| UN0378 | Primers, cap type |
| UN0379 | Cases, cartridges, empty with primer |
| UN0380 | Articles, pyrophoric |
| UN0381 | Cartridges, power device |
| UN0382 | Components, explosive train, n.o.s. |
| UN0383 | Components, explosive train, n.o.s. |
| UN0384 | Components, explosive train, n.o.s. |
| UN0385 | 5–Nitrobenzotriazol |
| UN0386 | Trinitrobenzenesulfonic acid |
| UN0387 | Trinitrofluorenone |

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| UN0388 | Trinitrotoluene and Trinitrobenzene mixtures or TNT and trinitrobenzene mixtures or TNT and hexanitrostilbene mixtures or Trinitrotoluene and hexanitrostilbene mixtures |
| UN0389 | Trinitrotoluene mixtures containing Trinitrobenzene and Hexanitrostilbene or TNT mixtures containing trinitrobenzene and hexanitrostilbene |
| UN0390 | Tritonal |
| UN0391 | RDX and HMX mixtures, <i>wetted with not less than 15 percent water by mass or RDX and HMX mixtures, desensitized with not less than 10 percent phlegmatizer by mass</i> |
| UN0392 | Hexanitrostilbene |
| UN0393 | Hexotonal |
| UN0394 | Trinitroresorcinol, <i>wetted or Styphnic acid, wetted with not less than 20 percent water, or mixture of alcohol and water, by mass</i> |
| UN0395 | Rocket motors, liquid fueled |
| UN0396 | Rocket motors, liquid fueled |
| UN0397 | Rockets, liquid fueled <i>with bursting charge</i> |
| UN0398 | Rockets, liquid fueled <i>with bursting charge</i> |
| UN0399 | Bombs with flammable liquid, <i>with bursting charge</i> |
| UN0400 | Bombs with flammable liquid, <i>with bursting charge</i> |
| UN0401 | Dipicryl sulfide, <i>dry or wetted with less than 10 percent water, by mass</i> |
| UN0402 | Ammonium perchlorate |
| UN0403 | Flares, aerial |
| UN0404 | Flares, aerial |
| UN0405 | Cartridges, signal |
| UN0406 | Dinitrosobenzene |
| UN0407 | Tetrazol-1-acetic acid |
| UN0408 | Fuzes, detonating, <i>with protective features</i> |
| UN0409 | Fuzes, detonating, <i>with protective features</i> |
| UN0410 | Fuzes, detonating, <i>with protective features</i> |
| UN0411 | Pentaerythrite tetranitrate or Pentaerythritol tetranitrate or PETN, <i>with not less than 7 percent wax by mass</i> |
| UN0412 | Cartridges for weapons, <i>with bursting charge</i> |
| UN0413 | Cartridges for weapons, blank |
| UN0414 | Charges, propelling, for cannon |
| UN0415 | Charges, propelling |
| UN0417 | Cartridges for weapons, inert projectile or Cartridges, small arms |
| UN0418 | Flares, surface |
| UN0419 | Flares, surface |
| UN0420 | Flares, aerial |
| UN0421 | Flares, aerial |
| UN0424 | Projectiles, <i>inert with tracer</i> |
| UN0425 | Projectiles, <i>inert with tracer</i> |
| UN0426 | Projectiles, <i>with burster or expelling charge</i> |
| UN0427 | Projectiles, <i>with burster or expelling charge</i> |
| UN0428 | Articles, pyrotechnic <i>for technical purposes</i> |
| UN0429 | Articles, pyrotechnic <i>for technical purposes</i> |
| UN0430 | Articles, pyrotechnic <i>for technical purposes</i> |
| UN0431 | Articles, pyrotechnic <i>for technical purposes</i> |
| UN0432 | Articles, pyrotechnic <i>for technical purposes</i> |

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| UN0433 | Powder cake, wetted <i>or</i> Powder paste, wetted <i>with not less than 17 percent alcohol by mass</i> |
| UN0434 | Projectiles, <i>with burster or expelling charge</i> |
| UN0435 | Projectiles, <i>with burster or expelling charge</i> |
| UN0436 | Rockets, <i>with expelling charge</i> |
| UN0437 | Rockets, <i>with expelling charge</i> |
| UN0438 | Rockets, <i>with expelling charge</i> |
| UN0439 | Charges, shaped, <i>without detonator</i> |
| UN0440 | Charges, shaped, <i>without detonator</i> |
| UN0441 | Charges, shaped, <i>without detonator</i> |
| UN0442 | Charges, explosive, commercial <i>without detonator</i> |
| UN0443 | Charges, explosive, commercial <i>without detonator</i> |
| UN0444 | Charges, explosive, commercial <i>without detonator</i> |
| UN0445 | Charges, explosive, commercial <i>without detonator</i> |
| UN0446 | Cases, combustible, empty, without primer |
| UN0447 | Cases, combustible, empty, without primer |
| UN0448 | 5–Mercaptotetrazol–1–acetic acid |
| UN0449 | Torpedoes, liquid fueled, <i>with or without bursting charge</i> |
| UN0450 | Torpedoes, liquid fueled, <i>with inert head</i> |
| UN0451 | Torpedoes <i>with bursting charge</i> |
| UN0452 | Grenades, practice, <i>hand or rifle</i> |
| UN0453 | Rockets, <i>line-throwing</i> |
| UN0454 | Igniters |
| UN0455 | Detonators, non–electric, <i>for blasting</i> |
| UN0456 | Detonators, electric, <i>for blasting</i> |
| UN0457 | Charges, bursting, plastics bonded |
| UN0458 | Charges, bursting, plastics bonded |
| UN0459 | Charges, bursting, plastics bonded |
| UN0460 | Charges, bursting, plastics bonded |
| UN0461 | Components, explosive train, n.o.s. |
| UN0462 | Articles, explosive, n.o.s. |
| UN0463 | Articles, explosive, n.o.s. |
| UN0464 | Articles, explosive, n.o.s. |
| UN0465 | Articles, explosive, n.o.s. |
| UN0466 | Articles, explosive, n.o.s. |
| UN0467 | Articles, explosive, n.o.s. |
| UN0468 | Articles, explosive, n.o.s. |
| UN0469 | Articles, explosive, n.o.s. |
| UN0470 | Articles, explosive, n.o.s. |
| UN0471 | Articles, explosive, n.o.s. |
| UN0472 | Articles, explosive, n.o.s. |
| NA0473 | Barium styphnate <i>or</i> Lead mononitroresorcinate |
| UN0473 | Substances, explosive, n.o.s. |
| UN0474 | Substances, explosive, n.o.s. |
| UN0475 | Substances, explosive, n.o.s. |
| UN0476 | Substances, explosive, n.o.s. |
| UN0477 | Substances, explosive, n.o.s. |

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| UN0478 | Substances, explosive, n.o.s. |
| UN0479 | Substances, explosive, n.o.s. |
| UN0480 | Substances, explosive, n.o.s. |
| UN0481 | Substances, explosive, n.o.s. |
| UN0482 | Substances, explosive, very insensitive, n.o.s., or Substances, EVI, n.o.s. |
| UN0483 | Cyclotrimethylenetrinitramine, desensitized or Cyclonite, desensitized or Hexogen, desensitized or RDX, desensitized |
| UN0484 | Cyclotetramethylenetetranitramine, desensitized or Octogen, desensitized or HMX, desensitized |
| UN0485 | Substances, explosive, n.o.s. |
| UN0486 | Articles, explosive, extremely insensitive or Articles, EEI |
| UN0487 | Signals, smoke |
| UN0488 | Ammunition, practice |
| UN0489 | Dinitroglycoluril or Dingu |
| UN0490 | Nitrotriazolone or NTO |
| UN0491 | Charges, propelling |
| UN0492 | Signals, railway track, explosive |
| UN0493 | Signals, railway track, explosive |
| NA0494 | Jet, perforating guns, charged oil well, with detonator |
| UN0494 | Jet, perforating guns, charged oil well, without detonator |
| UN0495 | Propellant, liquid |
| UN0496 | Octonal |
| UN0497 | Propellant, liquid |
| UN0498 | Propellant, solid |
| UN0499 | Propellant, solid |
| UN0500 | Detonator assemblies, non-electric for blasting |
| UN0503 | Air bag inflators, or Air bag modules, or Seatbelt pretensioners |
| UN0504 | 1H-Tetrazole |
| UN1001 | Acetylene, dissolved |
| UN1002 | Air, compressed |
| UN1003 | Air, refrigerated liquid, (cryogenic liquid) or Air, refrigerated liquid (cryogenic liquid) non-pressurized |
| UN1005 | Ammonia, anhydrous |
| UN1006 | Argon, compressed |
| UN1008 | Boron trifluoride |
| UN1009 | Bromotrifluoromethane or Refrigerant gas, R 13B1 |
| UN1010 | Butadienes, stabilized or Butadienes and Hydrocarbon mixture, stabilized containing more than 40% butadienes |
| UN1011 | Butane see also Petroleum gases, liquified |
| UN1012 | Butylene see also Petroleum gases, liquified |
| UN1013 | Carbon dioxide |
| UN1016 | Carbon monoxide, compressed |
| UN1017 | Chlorine |
| UN1018 | Chlorodifluoromethane or Refrigerant gas R 22 |
| UN1020 | Chloropentafluoroethane or Refrigerant gas R 115 |
| UN1021 | 1-Chloro-1,2,2,2-tetrafluoroethane or Refrigerant gas R 124 |
| UN1022 | Chlorotrifluoromethane or Refrigerant gas R 13 |
| UN1023 | Coal gas, compressed |

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| UN1026 | Cyanogen |
| UN1027 | Cyclopropane |
| UN1028 | Dichlorodifluoromethane <i>or</i> Refrigerant gas R 12 |
| UN1029 | Dichlorofluoromethane <i>or</i> Refrigerant gas R 21 |
| UN1030 | 1,1-Difluoroethane <i>or</i> Refrigerant gas R 152a |
| UN1032 | Dimethylamine, anhydrous |
| UN1033 | Dimethyl ether |
| UN1035 | Ethane |
| UN1036 | Ethylamine |
| UN1037 | Ethyl chloride |
| UN1038 | Ethylene, refrigerated liquid (<i>cryogenic liquid</i>) |
| UN1039 | Ethyl methyl ether |
| UN1040 | Ethylene oxide <i>or</i> Ethylene oxide with nitrogen <i>up to a total pressure of 1MPa (10 bar) at 50° C</i> |
| UN1041 | Ethylene oxide and carbon dioxide mixtures <i>with more than 9 percent but not more than 87 percent ethylene oxide</i> |
| UN1043 | Fertilizer ammoniating solution <i>with free ammonia</i> |
| UN1044 | Fire extinguishers containing <i>compressed or liquified gas</i> |
| UN1045 | Fluorine, compressed |
| UN1046 | Helium, compressed |
| UN1048 | Hydrogen bromide, anhydrous |
| UN1049 | Hydrogen, compressed |
| UN1050 | Hydrogen chloride, anhydrous |
| UN1051 | Hydrogen cyanide, stabilized <i>with less than 3 percent water</i> |
| UN1052 | Hydrogen fluoride, anhydrous |
| UN1053 | Hydrogen sulfide |
| UN1055 | Isobutylene <i>see also Petroleum gases, liquified</i> |
| UN1056 | Krypton, compressed |
| UN1057 | Lighters <i>or</i> Lighter refills <i>cigarettes, containing flammable gas</i> |
| UN1058 | Liquified gases, <i>nonflammable charged with nitrogen, carbon dioxide, or air</i> |
| UN1060 | Methyl acetylene and propadiene mixtures, stabilized |
| UN1061 | Methylamine, anhydrous |
| UN1062 | Methyl bromide |
| UN1063 | Methyl chloride, <i>or</i> Refrigerant gas R 40 |
| UN1064 | Methyl mercaptan |
| UN1065 | Neon, compressed |
| UN1066 | Nitrogen, compressed |
| UN1067 | Dinitrogen tetroxide |
| UN1069 | Nitrosyl chloride |
| UN1070 | Nitrous oxide |
| UN1071 | Oil gas, compressed |
| UN1072 | Oxygen, compressed |
| UN1073 | Oxygen, refrigerated liquid (<i>cryogenic liquid</i>) |
| UN1075 | Petroleum gases, liquified <i>or</i> Liquified petroleum gas |
| UN1076 | Phosgene |
| UN1077 | Propylene <i>see also Petroleum gases, liquified</i> |
| UN1078 | Refrigerant gases, n.o.s. |

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| UN1079 | Sulfur dioxide |
| UN1080 | Sulfur hexafluoride |
| UN1081 | Tetrafluoroethylene, stabilized |
| UN1082 | Trifluorochloroethylene, stabilized |
| UN1083 | Trimethylamine, anhydrous |
| UN1085 | Vinyl bromide, stabilized |
| UN1086 | Vinyl chloride, stabilized |
| UN1087 | Vinyl methyl ether, stabilized |
| UN1088 | Acetal |
| UN1089 | Acetaldehyde |
| UN1090 | Acetone |
| UN1091 | Acetone oils |
| UN1092 | Acrolein, stabilized |
| UN1093 | Acrylonitrile, stabilized |
| UN1098 | Allyl alcohol |
| UN1099 | Allyl bromide |
| UN1100 | Allyl chloride |
| UN1104 | Amyl acetates |
| UN1105 | Pentanol |
| UN1106 | Amylamines |
| UN1107 | Amyl chlorides |
| UN1108 | 1-Pentene (n-amylene) |
| UN1109 | Amyl formates |
| UN1110 | n-Amyl methyl ketone |
| UN1111 | Amyl mercaptans |
| UN1112 | Amyl nitrate |
| UN1113 | Amyl nitrites |
| UN1114 | Benzene |
| UN1120 | Butanol |
| UN1123 | Butyl acetates |
| UN1125 | n-Butylamine |
| UN1126 | 1-Bromobutane |
| UN1127 | Chlorobutanes |
| UN1128 | n-Butyl formate |
| UN1129 | Butyraldehyde |
| UN1130 | Camphor oil |
| UN1131 | Carbon disulfide |
| UN1133 | Adhesives, <i>containing a flammable liquid</i> |
| UN1134 | Chlorobenzene |
| UN1135 | Ethylene chlorohydrin |
| UN1136 | Coal tar distillates, flammable |
| UN1139 | Coating solution (<i>includes surface treatments or coatings used for industrial or other purposes such as vehicle undercoating, drum or barrel lining</i>) |
| UN1143 | Crotonaldehyde, or Crotonaldehyde, stabilized |
| UN1144 | Crotonylene |
| UN1145 | Cyclohexane |

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| UN1146 | Cyclopentane |
| UN1148 | Diacetone alcohol |
| UN1149 | Dibutyl ethers |
| UN1150 | 1,2-Dichloroethylene |
| UN1152 | Dichloropentanes |
| UN1153 | Ethylene glycol diethyl ether |
| UN1154 | Diethylamine |
| UN1155 | Diethyl ether or Ethyl ether |
| UN1156 | Diethyl ketone |
| UN1157 | Diisobutyl ketone |
| UN1158 | Diisopropylamine |
| UN1159 | Diisopropyl ether |
| UN1160 | Dimethylamine solution |
| UN1161 | Dimethyl carbonate |
| UN1162 | Dimethyldichlorosilane |
| UN1163 | Dimethylhydrazine, unsymmetrical |
| UN1164 | Dimethyl sulfide |
| UN1165 | Dioxane |
| UN1166 | Dioxolane |
| UN1167 | Divinyl ether, stabilized |
| UN1169 | Extracts, aromatic, liquid |
| UN1170 | Ethanol <i>or</i> Ethyl alcohol <i>or</i> Ethanol solutions <i>or</i> Ethyl alcohol solutions |
| UN1171 | Ethylene glycol monoethyl ether |
| UN1172 | Ethylene glycol monoethyl ether acetate |
| UN1173 | Ethyl acetate |
| UN1175 | Ethylbenzene |
| UN1176 | Ethyl borate |
| UN1177 | 2-Ethylbutyl acetate |
| UN1178 | 2-Ethylbutyraldehyde |
| UN1179 | Ethyl butyl ether |
| UN1180 | Ethyl butyrate |
| UN1181 | Ethyl chloroacetate |
| UN1182 | Ethyl chloroformate |
| UN1183 | Ethylchlorosilane |
| UN1184 | Ethylene dichloride |
| UN1185 | Ethyleneimine, stabilized |
| UN1188 | Ethylene glycol monomethyl ether |
| UN1189 | Ethylene glycol monomethyl ether acetate |
| UN1190 | Ethyl formate |
| UN1191 | Octyl aldehydes |
| UN1192 | Ethyl lactate |
| UN1193 | Ethyl methyl ketone <i>or</i> Methyl ethyl ketone |
| UN1194 | Ethyl nitrate solutions |
| UN1195 | Ethyl propionate |
| UN1196 | Ethyltrichlorosilane |
| UN1197 | Extracts, flavoring, liquid |

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| UN1198 | Formaldehyde, solutions, flammable |
| UN1199 | Furaldehydes |
| UN1201 | Fusel oil |
| UN1202 | Diesel fuel |
| NA1203 | Gasohol <i>gasoline mixed with ethyl alcohol, with not more than 20 percent alcohol</i> |
| UN1203 | Gasoline |
| UN1204 | Nitroglycerin, solution in alcohol, <i>with not more than 1 percent nitroglycerin</i> |
| UN1206 | Heptanes |
| UN1207 | Hexaldehyde |
| UN1208 | Hexanes |
| UN1210 | Printing ink, <i>flammable</i> |
| UN1212 | Isobutanol <i>or</i> Isobutyl alcohol |
| UN1213 | Isobutyl acetate |
| UN1214 | Isobutylamine |
| UN1216 | Isooctenes |
| UN1218 | Isoprene, inhibited |
| UN1219 | Isopropanol <i>or</i> Isopropyl alcohol |
| UN1220 | Isopropyl acetate |
| UN1221 | Isopropylamine |
| UN1222 | Isopropyl nitrate |
| UN1223 | Kerosene |
| UN1224 | Ketones, liquid, n.o.s. |
| NA1226 | Lighters for cigars, cigarettes, <i>etc.</i> , <i>with lighter fluids</i> |
| UN1228 | Mercaptans, liquid, flammable, toxic, n.o.s. <i>or</i> Mercaptan mixtures, liquid, flammable, toxic, n.o.s. |
| UN1229 | Mesityl oxide |
| UN1230 | Methanol |
| UN1231 | Methyl acetate |
| UN1233 | Methylamyl acetate |
| UN1234 | Methylal |
| UN1235 | Methylamine, aqueous solution |
| UN1237 | Methyl butyrate |
| UN1238 | Methyl chloroformate |
| UN1239 | Methyl chloromethyl ether |
| UN1242 | Methyldichlorosilane |
| UN1243 | Methyl formate |
| UN1244 | Methylhydrazine |
| UN1245 | Methyl isobutyl ketone |
| UN1246 | Methyl isopropenyl ketone, inhibited |
| UN1247 | Methyl methacrylate monomer, inhibited |
| UN1248 | Methyl propionate |
| UN1249 | Methyl propyl ketone |
| UN1250 | Methyltrichlorosilane |
| UN1251 | Methyl vinyl ketone, stabilized |
| UN1259 | Nickel carbonyl |
| UN1261 | Nitromethane |
| UN1262 | Octanes |

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| UN1263 | Paint <i>including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler, and liquid lacquer base, or Paint related material including paint thinning, drying, removing, or reducing compound</i> |
| UN1264 | Paraldehyde |
| UN1265 | Pentanes |
| UN1266 | Perfumery products <i>with flammable solvents</i> |
| UN1267 | Petroleum crude oil |
| UN1268 | Petroleum distillates, n.o.s. <i>or</i> Petroleum products, n.o.s. |
| NA1270 | Petroleum oil |
| UN1272 | Pine oil |
| UN1274 | n-Propanol <i>or</i> Propyl alcohol, normal |
| UN1275 | Propionaldehyde |
| UN1276 | n-Propyl acetate |
| UN1277 | Propylamine |
| UN1278 | 1-Chloropropane |
| UN1279 | 1,2-Dichloropropane |
| UN1280 | Propylene oxide |
| UN1281 | Propyl formates |
| UN1282 | Pyridine |
| UN1286 | Rosin oil |
| UN1287 | Rubber solution |
| UN1288 | Shale Oil |
| UN1289 | Sodium methylate solutions in alcohol |
| UN1292 | Tetraethyl silicate |
| UN1293 | Tinctures, medicinal |
| UN1294 | Toluene |
| UN1295 | Trichlorosilane |
| UN1296 | Triethylamine |
| UN1297 | Trimethylamine, aqueous solutions <i>with not more than 50 percent trimethylamine by mass</i> |
| UN1298 | Trimethylchlorosilane |
| UN1299 | Turpentine |
| UN1300 | Turpentine substitute |
| UN1301 | Vinyl acetate, stabilized |
| UN1302 | Vinyl ethyl ether, stabilized |
| UN1303 | Vinylidene chloride, stabilized |
| UN1304 | Vinyl isobutyl ether, stabilized |
| UN1305 | Vinyltrichlorosilane, stabilized |
| UN1306 | Wood preservatives, liquid |
| UN1307 | Xylenes |
| UN1308 | Zirconium suspended in a liquid |
| UN1309 | Aluminum powder, coated |
| UN1310 | Ammonium picrate, wetted <i>with not less than 10 percent water, by mass</i> |
| UN1312 | Borneol |
| UN1313 | Calcium resinate |
| UN1314 | Calcium resinate, fused |
| UN1318 | Cobalt resinate, precipitated |

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| UN1320 | Dinitrophenol, wetted <i>with not less than 15 percent water, by mass</i> |
| UN1321 | Dinitrophenolates, wetted <i>with not less than 15 percent water, by mass</i> |
| UN1322 | Dinitroresorcinol, wetted <i>with not less than 15 percent water, by mass</i> |
| UN1323 | Ferrocium |
| UN1324 | Films, nitrocellulose base, <i>gelatine coated (except scrap)</i> |
| NA1325 | Fusee (railway or highway) or Medicines, flammable, solid, n.o.s. |
| UN1325 | Flammable solids, organic, n.o.s. |
| UN1326 | Hafnium powder, wetted <i>with not less than 25 percent water (a visible excess of water must be present) (a) mechanically produced, particle size less than 53 microns; (b) chemically produced, particle size less than 840 microns</i> |
| UN1328 | Hexamethylenetetramine |
| UN1330 | Manganese resinate |
| UN1331 | Matches, strike anywhere |
| UN1332 | Metaldehyde |
| UN1333 | Cerium, <i>slabs, ingots, or rods</i> |
| UN1334 | Naphthalene, crude or Naphthalene, refined |
| UN1336 | Nitroguanidine, wetted or Picrite, wetted <i>with not less than 20 percent water, by mass</i> |
| UN1337 | Nitrostarch, wetted <i>with not less than 20 percent water, by mass</i> |
| UN1338 | Phosphorus, amorphous |
| UN1339 | Phosphorus heptasulfide, <i>free from yellow or white phosphorus</i> |
| UN1340 | Phosphorus pentasulfide, <i>free from yellow or white phosphorus</i> |
| UN1341 | Phosphorus sesquisulfide, <i>free from yellow or white phosphorus</i> |
| UN1343 | Phosphorus trisulfide, <i>free from yellow or white phosphorus</i> |
| NA1344 | Picric acid, wet, <i>with not less than 10 percent water</i> |
| UN1344 | Trinitrophenol, wetted <i>with not less than 30 percent water, by mass</i> |
| UN1346 | Silicon powder, amorphous |
| UN1347 | Silver picrate, wetted <i>with not less than 30 percent water, by mass</i> |
| UN1348 | Sodium dinitro- <i>o</i> -cresolate, wetted <i>with not less than 15 percent water, by mass</i> |
| UN1349 | Sodium picramate, wetted <i>with not less than 20 percent water, by mass</i> |
| NA1350 | Sulfur |
| UN1350 | Sulfur |
| UN1352 | Titanium powder, wetted <i>with not less than 25 percent water (a visible excess of water must be present) (a) mechanically produced, particle size less than 53 microns; (b) chemically produced, particle size less than 840 microns</i> |
| UN1353 | Fibers or Fabrics impregnated with weakly nitrated nitrocellulose, n.o.s. |
| UN1355 | Trinitrobenzoic acid, wetted <i>with not less than 30 percent water, by mass</i> |
| UN1356 | Trinitrotoluene wetted <i>with not less than 30 percent water, by mass</i> |
| UN1357 | Urea nitrate, wetted <i>with not less than 20 percent water, by mass</i> |
| UN1358 | Zirconium powder, wetted <i>with not less than 25 percent water (a visible excess of water must be present) (a) mechanically produced, particle size less than 53 microns; (b) chemically produced, particle size less than 840 microns</i> |
| UN1360 | Calcium phosphide |
| NA1361 | Charcoal briquettes, <i>shell, screenings, wood, etc.</i> |
| UN1361 | Carbon, <i>animal or vegetable origin</i> |
| UN1362 | Carbon, activated |
| UN1363 | Copra |
| UN1364 | Cotton waste, oily |

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| NA1365 | Cotton |
| UN1365 | Cotton, wet |
| UN1369 | p-Nitrosodimethylaniline |
| UN1372 | Fibers, animal or Fibers, vegetable <i>burnt, wet or damp</i> |
| UN1373 | Fibers or Fabrics, animal or vegetable or Synthetic, n.o.s. <i>with animal or vegetable oil</i> |
| UN1374 | Fish meal, unstabilized or Fish scrap, unstabilized |
| UN1376 | Iron oxide, spent, or Iron sponge, spent <i>obtained from coal gas purification</i> |
| UN1378 | Metal catalyst, wetted <i>with a visible excess of liquid</i> |
| UN1379 | Paper, unsaturated oil treated <i>incompletely dried (including carbon paper)</i> |
| UN1380 | Pentaporane |
| UN1381 | Phosphorus, white dry or Phosphorus, white, under water or Phosphorus white, in solution or Phosphorus, yellow dry or Phosphorus, yellow, under water or Phosphorus, yellow, in solution |
| UN1382 | Potassium sulfide, anhydrous or Potassium sulfide <i>with less than 30 percent water of crystallization</i> |
| UN1383 | Pyrophoric metals, n.o.s. or Pyrophoric alloys, n.o.s. |
| UN1384 | Sodium dithionite or Sodium hydrosulfite |
| UN1385 | Sodium sulfide, anhydrous or Sodium sulfide <i>with less than 30 percent water of crystallization</i> |
| UN1386 | Seed cake, <i>containing vegetable oil solvent extractions and expelled seeds, with not more than 10 percent of oil and when the amount of moisture is higher than 11 percent, with not more than 20 percent of oil and moisture combined or Seed cake with more than 1.5 percent oil and not more than 11 percent moisture</i> |
| UN1387 | Wool waste, wet |
| UN1389 | Alkali metal amalgam, liquid |
| UN1390 | Alkali metal amides |
| UN1391 | Alkali metal dispersions, or Alkaline earth metal dispersions |
| UN1392 | Alkaline earth metal amalgams, liquid |
| UN1393 | Alkaline earth metal alloys, n.o.s. |
| UN1394 | Aluminum carbide |
| UN1395 | Aluminum ferrosilicon powder |
| UN1396 | Aluminum powder, uncoated |
| UN1397 | Aluminum phosphide |
| UN1398 | Aluminum silicon powder, uncoated |
| UN1400 | Barium |
| UN1401 | Calcium |
| UN1402 | Calcium carbide |
| UN1403 | Calcium cyanamide <i>with more than 0.1 percent of calcium carbide</i> |
| UN1404 | Calcium hydride |
| UN1405 | Calcium silicide |
| UN1407 | Cesium or Caesium |
| UN1408 | Ferrosilicon, <i>with 30 percent or more but less than 90 percent silicon</i> |
| UN1409 | Metal hydrides, water-reactive, n.o.s. |
| UN1410 | Lithium aluminum hydride |
| UN1411 | Lithium aluminum hydride, ethereal |
| UN1413 | Lithium borohydride |
| UN1414 | Lithium hydride |
| UN1415 | Lithium |
| UN1417 | Lithium silicon |
| UN1418 | Magnesium, powder or Magnesium alloys, powder |

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| UN1419 | Magnesium aluminum phosphide |
| UN1420 | Potassium, metal alloys |
| UN1421 | Alkali metal alloys, liquid, n.o.s. |
| UN1422 | Potassium sodium alloys |
| UN1423 | Rubidium |
| UN1426 | Sodium borohydride |
| UN1427 | Sodium hydride |
| UN1428 | Sodium |
| UN1431 | Sodium methylate |
| UN1432 | Sodium phosphide |
| UN1433 | Stannic phosphide |
| UN1435 | Zinc ashes |
| UN1436 | Zinc powder <i>or</i> Zinc dust |
| UN1437 | Zirconium hydride |
| UN1438 | Aluminum, nitrate |
| UN1439 | Ammonium dichromate |
| UN1442 | Ammonium perchlorate |
| UN1444 | Ammonium persulfate |
| UN1445 | Barium chlorate, solid |
| UN1446 | Barium nitrate |
| UN1447 | Barium perchlorate, solid |
| UN1448 | Barium permanganate |
| UN1449 | Barium peroxide |
| UN1450 | Bromates, inorganic, n.o.s. |
| UN1451 | Cesium nitrate <i>or</i> Caesium nitrate |
| UN1452 | Calcium chlorate |
| UN1453 | Calcium chlorite |
| UN1454 | Calcium nitrate |
| UN1455 | Calcium perchlorate |
| UN1456 | Calcium permanganate |
| UN1457 | Calcium peroxide |
| UN1458 | Chlorate and borate mixtures |
| UN1459 | Chlorate and magnesium chloride mixture, solid |
| UN1461 | Chlorates, inorganic, n.o.s. |
| UN1462 | Chlorites, inorganic, n.o.s. |
| NA1463 | Chromic acid, solid |
| UN1463 | Chromium trioxide, anhydrous |
| UN1465 | Didymium nitrate |
| UN1466 | Ferric nitrate |
| UN1467 | Guanidine nitrate |
| UN1469 | Lead nitrate |
| UN1470 | Lead perchlorate, solid <i>or</i> Lead perchlorate, solution |
| UN1471 | Lithium hypochlorite, dry <i>or</i> Lithium hypochlorite mixtures, dry |
| UN1472 | Lithium peroxide |
| UN1473 | Magnesium bromate |
| UN1474 | Magnesium nitrate |

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| UN1475 | Magnesium perchlorate |
| UN1476 | Magnesium peroxide |
| UN1477 | Nitrates, inorganic, n.o.s. |
| NA1479 | Medicines, oxidizing substance, solid, n.o.s. |
| UN1479 | Oxidizing solid, n.o.s. |
| UN1481 | Perchlorates, inorganic, n.o.s. |
| UN1482 | Permanganates, inorganic, n.o.s. |
| UN1483 | Peroxides, inorganic, n.o.s. |
| UN1484 | Potassium bromate |
| UN1485 | Potassium chlorate |
| UN1486 | Potassium nitrate |
| UN1487 | Potassium nitrate and sodium nitrite mixtures |
| UN1488 | Potassium nitrite |
| UN1489 | Potassium perchlorate, solid <i>or</i> Potassium perchlorate, solution |
| UN1490 | Potassium permanganate |
| UN1491 | Potassium peroxide |
| UN1492 | Potassium persulfate |
| UN1493 | Silver nitrate |
| UN1494 | Sodium bromate |
| UN1495 | Sodium chlorate |
| UN1496 | Sodium chlorite |
| UN1498 | Sodium nitrate |
| UN1499 | Sodium nitrate and potassium nitrate mixtures |
| UN1500 | Sodium nitrite |
| UN1502 | Sodium perchlorate |
| UN1503 | Sodium permanganate |
| UN1504 | Sodium peroxide |
| UN1505 | Sodium persulfate |
| UN1506 | Strontium chlorate |
| UN1507 | Strontium nitrate |
| UN1508 | Strontium perchlorate |
| UN1509 | Strontium peroxide |
| UN1510 | Tetranitromethane |
| UN1511 | Urea hydrogen peroxide |
| UN1512 | Zinc ammonium nitrite |
| UN1513 | Zinc chlorate |
| UN1514 | Zinc nitrate |
| UN1515 | Zinc permanganate |
| UN1516 | Zinc peroxide |
| UN1517 | Zirconium picramate, wetted <i>with not less than 20 percent water, by mass</i> |
| UN1541 | Acetone cyanohydrin, stabilized |
| UN1544 | Alkaloids, solid, n.o.s. <i>or</i> Alkaloid salts, solid, n.o.s. <i>poisonous</i> |
| UN1545 | Allyl isothiocyanate, stabilized |
| UN1546 | Ammonium arsenate |
| UN1547 | Aniline |
| UN1548 | Aniline hydrochloride |

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| NA1549 | Antimony tribromide, solution <i>or</i> Antimony, trifluoride, solid <i>or</i> Antimony, trifluoride, solution <i>or</i> Antimony tribromide, solid |
| UN1549 | Antimony compounds, inorganic, solid, n.o.s. |
| UN1550 | Antimony lactate |
| UN1551 | Antimony potassium tartrate |
| UN1553 | Arsenic acid, liquid |
| UN1554 | Arsenic acid, solid |
| UN1555 | Arsenic bromide |
| NA1556 | Methyldichloroarsine |
| UN1556 | Arsenic compounds, liquid, n.o.s. <i>inorganic, including arsenates, n.o.s.; arsenites, n.o.s.; arsenic sulfides, n.o.s.; and organic compounds of arsenic, n.o.s.</i> |
| NA1557 | Arsenic sulfide <i>or</i> Arsenic trisulfide |
| UN1557 | Arsenic compounds, solid, n.o.s. <i>inorganic, including arsenates, n.o.s.; arsenites, n.o.s.; arsenic sulfides, n.o.s.; and organic compounds of arsenic, n.o.s.</i> |
| UN1558 | Arsenic |
| UN1559 | Arsenic pentoxide |
| UN1560 | Arsenic trichloride |
| UN1561 | Arsenic trioxide |
| UN1562 | Arsenical dust |
| UN1564 | Barium compounds, n.o.s. |
| UN1565 | Barium cyanide |
| UN1566 | Beryllium compounds, n.o.s. |
| UN1567 | Beryllium, powder |
| UN1569 | Bromoacetone |
| UN1570 | Brucine |
| UN1571 | Barium azide, wetted with not less than 50 percent water, by mass |
| UN1572 | Cacodylic acid |
| UN1573 | Calcium arsenate |
| NA1574 | Calcium arsenite, solid |
| UN1574 | Calcium arsenate and calcium arsenite, mixtures, solid |
| UN1575 | Calcium cyanide |
| UN1577 | Chlorodinitrobenzenes, liquid |
| UN1578 | Chloronitrobenzene, solid |
| UN1579 | 4-Chloro-o-toluidine hydrochloride, solid |
| UN1580 | Chloropicrin |
| UN1581 | Chloropicrin and methyl bromide mixtures |
| UN1582 | Chloropicrin and methyl chloride mixtures |
| UN1583 | Chloropicrin mixtures, n.o.s. |
| UN1585 | Copper acetoarsenite |
| UN1586 | Copper arsenite |
| UN1587 | Copper cyanide |
| UN1588 | Cyanides, inorganic, solid, n.o.s. |
| UN1589 | Cyanogen chloride, stabilized |
| UN1590 | Dichloroanilines, liquid |
| UN1591 | o-Dichlorobenzene |
| UN1593 | Dichloromethane |

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| UN1594 | Diethyl sulfate |
| UN1595 | Dimethyl sulfate |
| UN1596 | Dinitroanilines |
| UN1597 | Dinitrobenzenes, liquid |
| UN1598 | Dintro–o–cresol |
| UN1599 | Dinitrophenol solutions |
| UN1600 | Dinitrotoluenes, molten |
| UN1601 | Disinfectants, solid, toxic, n.o.s. |
| UN1602 | Dyes, liquid, toxic, n.o.s. <i>or</i> Dye intermediates, liquid, toxic, n.o.s. |
| UN1603 | Ethyl bromoacetate |
| UN1604 | Ethylenediamine |
| UN1605 | Ethylene dibromide |
| UN1606 | Ferric arsenate |
| UN1607 | Ferric arsenite |
| UN1608 | Ferrous arsenate |
| UN1611 | Hexaethyl tetraphosphate, liquid <i>or</i> Hexaethyl tetraphosphate, solid |
| UN1612 | Hexaethyl tetraphosphate and compressed gas mixtures |
| UN1613 | Hydrocyanic acid, aqueous solutions <i>or</i> Hydrogen cyanide, aqueous solutions <i>with not more than 20 percent hydrogen cyanide or</i> Hydrocyanic acid, aqueous solutions <i>with less than 5 percent hydrogen cyanide</i> |
| UN1614 | Hydrogen cyanide, stabilized <i>with less than 3 percent water and absorbed in a porous inert material</i> |
| UN1616 | Lead acetate |
| UN1617 | Lead arsenates |
| UN1618 | Lead arsenites |
| UN1620 | Lead cyanide |
| UN1621 | London purple |
| UN1622 | Magnesium arsenate |
| UN1623 | Mercuric arsenate |
| UN1624 | Mercuric chloride |
| UN1625 | Mercuric nitrate |
| UN1626 | Mercuric potassium cyanide |
| UN1627 | Mercurous nitrate |
| UN1629 | Mercury acetate |
| UN1630 | Mercury ammonium chloride |
| UN1631 | Mercury benzoate |
| UN1634 | Mercury bromides |
| UN1636 | Mercury cyanide |
| UN1637 | Mercury gluconate |
| UN1638 | Mercury iodide, solution <i>or</i> Mercury iodide, solid |
| UN1639 | Mercury nucleate |
| UN1640 | Mercury oleate |
| UN1641 | Mercury oxide |
| UN1642 | Mercury oxycyanide, desensitized |
| UN1643 | Mercury potassium iodide |
| UN1644 | Mercury salicylate |
| UN1645 | Mercury sulfates |

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| UN1646 | Mercury thiocyanate |
| UN1647 | Methyl bromide and ethylene dibromide mixtures, liquid |
| UN1648 | Acetonitrile |
| UN1649 | Motor fuel anti-knock mixtures |
| UN1650 | beta-Naphthylamine |
| UN1651 | Naphthylthiourea |
| UN1652 | Naphthylurea |
| UN1653 | Nickel cyanide |
| UN1654 | Nicotine |
| UN1655 | Nicotine compounds, solid, n.o.s. <i>or</i> Nicotine preparations, solid, n.o.s. |
| UN1656 | Nicotine hydrochloride <i>or</i> Nicotine hydrochloride solution |
| UN1657 | Nicotine salicylate |
| UN1658 | Nicotine sulfate, solid <i>or</i> Nicotine sulfate, solution |
| UN1659 | Nicotine tartrate |
| UN1660 | Nitric oxide, compressed |
| UN1661 | Nitroanilines (<i>o</i> -; <i>m</i> -; <i>p</i> -;) |
| UN1662 | Nitrobenzene |
| UN1663 | Nitrophenols (<i>o</i> -; <i>m</i> -; <i>p</i> -;) |
| UN1664 | Nitrotoluenes, liquid (<i>o</i> -; <i>m</i> -; <i>p</i> -;) <i>or</i> Nitrotoluenes, solid (<i>m</i> -; <i>or p</i> -;) |
| UN1665 | Nitroxylens (<i>o</i> -; <i>m</i> -; <i>p</i> -') |
| UN1669 | Pentachloroethane |
| UN1670 | Perchloromethyl mercaptan |
| UN1671 | Phenol, solid |
| UN1672 | Phenylcarbylamine chloride |
| UN1673 | Phenylenediamines (<i>o</i> -; <i>m</i> -; <i>p</i> -;) |
| UN1674 | Phenylmercuric acetate |
| UN1677 | Potassium arsenate |
| UN1678 | Potassium arsenite |
| UN1679 | Potassium cuprocyanide |
| UN1680 | Potassium cyanide |
| UN1683 | Silver arsenite |
| UN1684 | Silver cyanide |
| UN1685 | Sodium arsenate |
| UN1686 | Sodium arsenite, aqueous solutions |
| UN1687 | Sodium azide |
| UN1688 | Sodium cacodylate |
| UN1689 | Sodium cyanide |
| UN1690 | Sodium fluoride |
| UN1691 | Strontium arsenite |
| UN1692 | Strychnine <i>or</i> Strychnine salts |
| NA1693 | Tear gas devices <i>with more than 2 percent tear gas substances, by mass</i> |
| UN1693 | Tear gas substances, liquid, n.o.s. |
| UN1694 | Bromobenzyl cyanides, <i>liquid</i> |
| UN1695 | Chloroacetone, stabilized |
| UN1697 | Chloroacetophenone (CN), solid |
| UN1698 | Diphenylamine chloroarsine |

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| UN1699 | Diphenylchloroarsine, liquid |
| UN1700 | Tear gas candles |
| UN1701 | Xylyl bromide, liquid |
| UN1702 | 1,1,2,-Tetrachloroethane |
| UN1704 | Tetraethyl dithiopyrophosphate |
| UN1707 | Thallium compounds, n.o.s. |
| UN1708 | Toluidines liquid |
| UN1709 | 2,4-Toluylenediamine, solid <i>or</i> 2,4-Toluenediamine, solid |
| UN1710 | Trichloroethylene |
| UN1711 | Xylidines, liquid |
| UN1712 | Zinc arsenate <i>or</i> Zinc arsenite <i>or</i> Zinc arsenate and zinc arsenite mixtures |
| UN1713 | Zinc cyanide |
| UN1714 | Zinc phosphide |
| UN1715 | Acetic anhydride |
| UN1716 | Acetyl bromide |
| UN1717 | Acetyl chloride |
| UN1718 | Butyl acid phosphate |
| UN1719 | Caustic alkali liquids, n.o.s. |
| UN1722 | Allyl chloroformate |
| UN1723 | Allyl iodide |
| UN1724 | Allyltrichlorosilane, stabilized |
| UN1725 | Aluminum bromide, anhydrous |
| UN1726 | Aluminum chloride, anhydrous |
| UN1727 | Ammonium hydrogendifluoride, solid |
| UN1728 | Amyltrichlorosilane |
| UN1729 | Anisoyl chloride |
| UN1730 | Antimony pentachloride, liquid |
| UN1731 | Antimony pentachloride, solutions |
| UN1732 | Antimony pentafluoride |
| UN1733 | Antimony trichloride, liquid <i>or</i> Antimony trichloride, solid |
| UN1736 | Benzoyl chloride |
| UN1737 | Benzyl bromide |
| UN1738 | Benzyl chloride <i>or</i> Benzyl chloride unstabilized |
| UN1739 | Benzyl chloroformate |
| UN1740 | Hydrogendifluorides, n.o.s. <i>solid or</i> Hydrogendifluorides, n.o.s. <i>solutions</i> |
| UN1741 | Boron trichloride |
| UN1742 | Boron trifluoride acetic acid complex, liquid |
| UN1743 | Boron trifluoride propionic acid complex, liquid |
| UN1744 | Bromine <i>or</i> Bromine solutions |
| UN1745 | Bromine pentafluoride |
| UN1746 | Bromine trifluoride |
| UN1747 | Butyltrichlorosilane |
| UN1748 | Calcium hypochlorite, dry <i>or</i> Calcium hypochlorite mixtures dry <i>with more than 39 percent available chlorine (8.8 percent available oxygen)</i> |
| UN1749 | Chlorine trifluoride |
| UN1750 | Chloroacetic acid, solution |

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| UN1751 | Chloroacetic acid, solid |
| UN1752 | Chloroacetyl chloride |
| UN1753 | Chlorophenyltrichlorosilane |
| UN1754 | Chlorosulfonic acid (<i>with or without sulfur trioxide</i>) |
| UN1755 | Chromic acid solution |
| UN1756 | Chromic fluoride, solid |
| UN1757 | Chromic fluoride, solution |
| UN1758 | Chromium oxychloride |
| NA1759 | Ferrous chloride, solid |
| UN1759 | Corrosive solids, n.o.s. |
| NA1760 | Ferrous chloride, solution |
| UN1760 | Corrosive liquids, n.o.s. |
| UN1761 | Cupriethylenediamine solution |
| UN1762 | Cyclohexenyltrichlorosilane |
| UN1763 | Cyclohexyltrichlorosilane |
| UN1764 | Dichloroacetic acid |
| UN1765 | Dichloroacetyl chloride |
| UN1766 | Dichlorophenyltrichlorosilane |
| UN1767 | Diethyldichlorosilane |
| UN1768 | Difluorophosphoric acid, anhydrous |
| UN1769 | Diphenyldichlorosilane |
| UN1770 | Diphenylmethyl bromide |
| UN1771 | Dodecyltrichlorosilane |
| UN1773 | Ferric chloride, anhydrous |
| UN1774 | Fire extinguisher charges, <i>corrosive liquid</i> |
| UN1775 | Fluoroboric acid |
| UN1776 | Fluorophosphoric acid anhydrous |
| UN1777 | Fluorosulfonic acid |
| UN1778 | Fluorosilicic acid |
| UN1779 | Formic acid |
| UN1780 | Fumaryl chloride |
| UN1781 | Hexadecyltrichlorosilane |
| UN1782 | Hexafluorophosphoric acid |
| UN1783 | Hexamethylenediamine solution |
| UN1784 | Hexyltrichlorosilane |
| UN1786 | Hydrofluoric acid and Sulfuric acid mixtures |
| UN1787 | Hydriodic acid |
| UN1788 | Hydrobromic acid, <i>with more than 49 percent hydrobromic acid</i> or Hydrobromic acid, <i>with not more than 49 percent hydrobromic acid</i> |
| UN1789 | Hydrochloric acid |
| UN1790 | Hydrofluoric acid, <i>with more than 60 percent strength</i> or Hydrofluoric acid, <i>with not more than 60 percent strength</i> |
| UN1791 | Hypochlorite solutions |
| UN1792 | Iodine monochloride |
| UN1793 | Isopropyl acid phosphate |
| UN1794 | Lead sulfate <i>with more than 3 percent free acid</i> |

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| UN1796 | Nitrating acid mixtures, <i>with more than 50 percent nitric acid</i> or Nitrating acid mixtures, <i>with not more than 50 percent nitric acid</i> |
| UN1798 | Nitrohydrochloric acid |
| UN1799 | Nonyltrichlorosilane |
| UN1800 | Octadecyltrichlorosilane |
| UN1801 | Octyltrichlorosilane |
| UN1802 | Perchloric acid <i>with not more than 50 percent acid by mass</i> |
| UN1803 | Phenolsulfonic acid, liquid |
| UN1804 | Phenyltrichlorosilane |
| UN1805 | Phosphoric acid |
| UN1806 | Phosphorus pentachloride |
| UN1807 | Phosphorus pentoxide |
| UN1808 | Phosphorus tribromide |
| UN1809 | Phosphorus trichloride |
| UN1810 | Phosphorus oxychloride |
| UN1811 | Potassium hydrogendifluoride, solid <i>or</i> Potassium hydrogendifluoride, solution |
| UN1812 | Potassium fluoride |
| UN1813 | Potassium hydroxide, solid |
| UN1814 | Potassium hydroxide, solution |
| UN1815 | Propionyl chloride |
| UN1816 | Propyltrichlorosilane |
| UN1817 | Pyrosulfuryl chloride |
| UN1818 | Silicon tetrachloride |
| UN1819 | Sodium aluminate, solution |
| UN1823 | Sodium hydroxide, solid |
| UN1824 | Sodium hydroxide solution |
| UN1825 | Sodium monoxide |
| UN1826 | Nitrating acid mixtures, spent <i>with more than 50 percent nitric acid</i> or Nitrating acid mixtures, spent <i>with not more than 50 percent nitric acid</i> |
| UN1827 | Stannic chloride, anhydrous |
| UN1828 | Sulfur chlorides |
| UN1829 | Sulfur trioxide, inhibited <i>or</i> Sulfur trioxide, stabilized |
| UN1830 | Sulfuric acid <i>with more than 51 percent acid</i> |
| UN1831 | Sulfuric acid, <i>fuming with 30 percent or more free sulfur trioxide</i> <i>or</i> Sulfuric acid, <i>fuming with less than 30 percent free sulfur trioxide</i> |
| UN1832 | Sulfuric acid, spent |
| UN1833 | Sulfurous acid |
| UN1834 | Sulfuryl chloride |
| UN1835 | Tetramethylammonium hydroxide solution |
| UN1836 | Thionyl chloride |
| UN1837 | Thiophosphoryl chloride |
| UN1838 | Titanium tetrachloride |
| UN1839 | Trichloroacetic acid |
| UN1840 | Zinc chloride, solution |
| UN1841 | Acetaldehyde ammonia |
| UN1843 | Ammonium dinitro- <i>o</i> -cresolate, solid |

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| UN1845 | Carbon dioxide, solid, <i>or</i> Dry ice |
| UN1846 | Carbon tetrachloride |
| UN1847 | Potassium sulfide, <i>hydrated with not less than 30 percent water of crystallization</i> |
| UN1848 | Propionic acid |
| UN1849 | Sodium sulfide, <i>hydrated with not less than 30 percent water</i> |
| UN1851 | Medicine, liquid, toxic, n.o.s. |
| UN1854 | Barium alloys, pyrophoric |
| UN1855 | Calcium, pyrophoric <i>or</i> Calcium alloys, pyrophoric |
| UN1857 | Textile waste, wet |
| UN1858 | Hexafluoropropylene, compressed <i>or</i> Refrigerant gas R 1216 |
| UN1859 | Silicon tetrafluoride, compressed |
| UN1860 | Vinyl fluoride, inhibited |
| UN1862 | Ethyl crotonate |
| UN1863 | Fuel, aviation, turbine engine |
| UN1865 | n-Propyl nitrate |
| UN1866 | Resin solution, <i>flammable</i> |
| UN1869 | Magnesium <i>or</i> Magnesium alloys with more than 50 percent magnesium in pellets, turnings, <i>or</i> ribbons |
| UN1870 | Potassium borohydride |
| UN1871 | Titanium hydride |
| UN1872 | Lead dioxide |
| UN1873 | Perchloric acid with more than 50 percent but not more than 72 percent acid, by mass |
| UN1884 | Barium oxide |
| UN1885 | Benzidine |
| UN1886 | Benzylidene chloride |
| UN1887 | Bromochloromethane |
| UN1888 | Chloroform |
| UN1889 | Cyanogen bromide |
| UN1891 | Ethyl bromide |
| UN1892 | Ethyldichloroarsine |
| UN1894 | Phenylmercuric hydroxide |
| UN1895 | Phenylmercuric nitrate |
| UN1897 | Tetrachloroethylene |
| UN1898 | Acetyl iodide |
| UN1902 | Diisooctyl acid phosphate |
| UN1903 | Disinfectants, liquid, corrosive, n.o.s. |
| UN1905 | Selenic acid |
| UN1906 | Sludge, acid |
| UN1907 | Soda lime with more than 4 percent sodium hydroxide |
| UN1908 | Chlorite solution |
| UN1910 | Calcium oxide |
| NA1911 | Diborane mixtures |
| UN1911 | Diborane |
| UN1912 | Methyl chloride and methylene chloride mixtures |
| UN1913 | Neon, refrigerated liquid (<i>cryogenic liquid</i>) |
| UN1914 | Butyl propionates |

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| UN1915 | Cyclohexanone |
| UN1916 | 2,2'-Dichlorodiethyl ether |
| UN1917 | Ethyl acrylate, stabilized |
| UN1918 | Isopropylbenzene |
| UN1919 | Methyl acrylate, inhibited |
| UN1920 | Nonanes |
| UN1921 | Propyleneimine, inhibited |
| UN1922 | Pyrrolidine |
| UN1923 | Calcium dithionite <i>or</i> Calcium hydrosulfite |
| UN1928 | Methyl magnesium bromide, in ethyl ether |
| UN1929 | Potassium dithionite <i>or</i> Potassium hydrosulfite |
| UN1931 | Zinc dithionite <i>or</i> Zinc hydrosulfite |
| UN1932 | Zirconium scrap |
| UN1935 | Cyanide solutions, n.o.s. |
| UN1938 | Bromoacetic acid, <i>solution</i> |
| UN1939 | Phosphorus oxybromide |
| UN1940 | Thioglycolic acid |
| UN1941 | Dibromodifluoromethane, R12B2 |
| UN1942 | Ammonium nitrate, <i>with not more than 0.2 percent of combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance</i> |
| UN1944 | Matches, safety (<i>book, card, or strike on box</i>) |
| UN1945 | Matches, wax, Vesta |
| UN1950 | Aerosols, <i>corrosive, Packing Group II or III, (each not exceeding 1 L capacity) or Aerosols, flammable (each not exceeding 1 L capacity) or Aerosols, flammable, n.o.s. (engine starting fluid) (each not exceeding 1 L capacity) or Aerosols, nonflammable (each not exceeding 1 L capacity) or Aerosols, poison, each not exceeding 1 L capacity</i> |
| UN1951 | Argon, refrigerated liquid (<i>cryogenic liquid</i>) |
| UN1952 | Ethylene oxide and carbon dioxide <i>mixtures with not more than 9 percent ethylene oxide</i> |
| UN1953 | Compressed gas, toxic, flammable, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i> |
| NA1954 | Insecticide gases flammable n.o.s. <i>or</i> Refrigerant gases, n.o.s., <i>or</i> Dispersant gases, n.o.s. <i>or</i> Refrigerating machines, <i>containing flammable, nonpoisonous, liquified gas</i> |
| UN1954 | Compressed gas, flammable, n.o.s. |
| NA1955 | Organic phosphate, mixed with compressed gas <i>or</i> Organic phosphate compound, mixed with compressed gas <i>or</i> Organic phosphorous compound, mixed with compressed gas |
| UN1955 | Compressed gas, toxic, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i> |
| NA1956 | Accumulators, pressurized, pneumatic <i>or</i> hydraulic (<i>containing nonflammable gas</i>) |
| UN1956 | Compressed gas, n.o.s. |
| UN1957 | Deuterium, compressed |
| UN1958 | 1,2-Dichloro-1,1,2,2-Tetrafluoroethane <i>or</i> Refrigerant gas R 114 |
| UN1959 | 1,1-Difluoroethylene <i>or</i> Refrigerant gas R 1132a |
| NA1961 | Ethane-Propane mixture, refrigerated liquid |
| UN1961 | Ethane, refrigerated liquid |
| UN1962 | Ethylene |
| UN1963 | Helium, refrigerated liquid (<i>cryogenic liquid</i>) |
| UN1964 | Hydrocarbon gas mixture, compressed, n.o.s. |
| UN1965 | Hydrocarbon gas mixtures, liquified, n.o.s. |
| UN1966 | Hydrogen, refrigerated liquid (<i>cryogenic liquid</i>) |

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| NA1967 | Parathion and compressed gas mixture |
| UN1967 | Insecticide gases, toxic, n.o.s. |
| UN1968 | Insecticide gases, n.o.s. |
| UN1969 | Isobutane <i>see also Petroleum gases, liquified</i> |
| UN1970 | Krypton, refrigerated liquid (<i>cryogenic liquid</i>) |
| UN1971 | Methane, compressed <i>or</i> Natural gas, compressed (<i>with high methane content</i>) |
| UN1972 | Methane, refrigerated liquid (<i>cryogenic liquid</i>) <i>or</i> Natural gas, refrigerated liquid (<i>cryogenic liquid</i>), <i>with high methane content</i> |
| UN1973 | Chlorodifluoromethane and chloropentafluoroethane mixture <i>or</i> Refrigerant gas R 502 <i>with fixed boiling point, with approximately 49 percent chlorodifluoromethane</i> |
| UN1974 | Chlorodifluorobromomethane <i>or</i> Refrigerant gas R 12B1 |
| UN1975 | Nitric oxide and dinitrogen tetroxide mixtures <i>or</i> Nitric oxide and nitrogen dioxide mixtures |
| UN1976 | Octafluorocyclobutane, <i>or</i> Refrigerant gas RC 318 |
| UN1977 | Nitrogen, refrigerated liquid <i>cryogenic liquid</i> |
| UN1978 | Propane <i>see also Petroleum gases, liquified</i> |
| UN1979 | Rare gases, mixtures, compressed |
| UN1980 | Rare gases and oxygen mixtures, compressed |
| UN1981 | Rare gases and nitrogen mixtures, compressed |
| UN1982 | Tetrafluoromethane, compressed <i>or</i> Refrigerant gas R 14 |
| UN1983 | 1-Chloro-2,2,2-trifluoroethane <i>or</i> Refrigerant gas R 133a |
| UN1984 | Trifluoromethane <i>or</i> Refrigerant gas R 23 |
| UN1986 | Alcohols, flammable, toxic, n.o.s. |
| NA1987 | Denatured alcohol |
| UN1987 | Alcohols, n.o.s. |
| UN1988 | Aldehydes, flammable, toxic, n.o.s. |
| UN1989 | Aldehydes, n.o.s. |
| UN1990 | Benzaldehyde |
| UN1991 | Chloroprene, stabilized |
| UN1992 | Flammable liquids, toxic, n.o.s. |
| NA1993 | Diesel fuel |
| UN1993 | Flammable liquids, n.o.s. |
| UN1994 | Iron pentacarbonyl |
| NA1999 | Asphalt, liquid <i>including road oils and cutback, bitumens</i> |
| UN1999 | Tars, liquid <i>including road asphalt and oils, bitumen and cut backs</i> |
| UN2000 | Celluloid, <i>in block, rods, rolls, sheets, tubes, etc., except scrap</i> |
| UN2001 | Cobalt naphthenates, powder |
| UN2002 | Celluloid, scrap |
| UN2003 | Metal alkyls, water-reactive, n.o.s. <i>or</i> Metal aryls, water-reactive, n.o.s. |
| UN2004 | Magnesium diamide |
| UN2005 | Magnesium diphenyl |
| UN2006 | Plastics, nitrocellulose-based, self-heating, n.o.s. |
| UN2008 | Zirconium powder, dry |
| UN2009 | Zirconium, dry, <i>finished sheets, strip or coiled wire</i> |
| UN2010 | Magnesium hydride |
| UN2011 | Magnesium phosphide |
| UN2012 | Potassium phosphide |

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| UN2013 | Strontium phosphide |
| UN2014 | Hydrogen peroxide, aqueous solutions <i>with more than 40 percent but not more than 60 percent hydrogen peroxide (stabilized as necessary)</i> or Hydrogen peroxide, aqueous solutions <i>with not less than 20 percent but not more than 40 percent hydrogen peroxide (stabilized as necessary)</i> |
| UN2015 | Hydrogen peroxide, stabilized or Hydrogen peroxide aqueous solutions, stabilized <i>with more than 60 percent hydrogen peroxide</i> |
| UN2016 | Ammunition, toxic, non-explosive, <i>without burster or expelling charge, non-fuzed</i> |
| UN2017 | Ammunition, tear-producing, non-explosive, <i>without burster or expelling charge, non-fuzed</i> |
| UN2018 | Chloroanilines, solid |
| UN2019 | Chloroanilines, liquid |
| UN2020 | Chlorophenols, solid |
| UN2021 | Chlorophenols, liquid |
| UN2022 | Cresylic acid |
| UN2023 | Epichlorohydrin |
| UN2024 | Mercury compounds, liquid, n.o.s. |
| UN2025 | Mercury compounds, solid, n.o.s. |
| UN2026 | Phenylmercuric compounds, n.o.s. |
| UN2027 | Sodium arsenite, solid |
| UN2028 | Bombs, smoke, non-explosive, <i>with corrosive liquid, without initiating device</i> |
| UN2029 | Hydrazine, anhydrous or Hydrazine aqueous solutions <i>with more than 64 percent hydrazine, by mass</i> |
| UN2030 | Hydrazine hydrate or Hydrazine aqueous solutions, <i>with not less than 37 percent but not more than 64 percent hydrazine, by mass</i> |
| UN2031 | Nitric acid <i>other than red fuming, with more than 70 percent nitric acid</i> or Nitric acid <i>other than red fuming, with not more than 70 percent nitric acid</i> |
| UN2032 | Nitric acid, red fuming |
| UN2033 | Potassium monoxide |
| UN2034 | Hydrogen and Methane mixtures, compressed |
| UN2035 | 1,1,1-Trifluoroethane, compressed or Refrigerant gas R 143a |
| UN2036 | Xenon, compressed |
| UN2037 | Gas cartridges (<i>flammable</i>) <i>without a release device, non-refillable</i> or Receptacles, small, containing gas (<i>gas cartridges</i>) <i>flammable or nonflammable, without release device, not refillable and not exceeding 1 L capacity</i> |
| UN2038 | Dinitrotoluenes, liquid |
| UN2044 | 2,2-Dimethylpropane |
| UN2045 | Isobutyraldehyde or Isobutyl aldehyde |
| UN2046 | Cymenes |
| UN2047 | Dichloropropenes |
| UN2048 | Dicyclopentadiene |
| UN2049 | Diethylbenzene |
| UN2050 | Diisobutylene, isomeric compounds |
| UN2051 | 2-Dimethylaminoethanol |
| UN2052 | Dipentene |
| UN2053 | Methyl isobutyl carbinol |
| UN2054 | Morpholine |
| UN2055 | Styrene monomer, inhibited |
| UN2056 | Tetrahydrofuran |
| UN2057 | Tripropylene |

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| UN2058 | Valeraldehyde |
| UN2059 | Nitrocellulose, solution, flammable <i>with not less than 12.6 percent nitrogen, by mass, and not more than 55 percent nitrocellulose</i> |
| UN2067 | Ammonium nitrate based fertilizers |
| NA2069 | Ammonium nitrate mixed fertilizers |
| UN2071 | Ammonium nitrate based fertilizers |
| NA2072 | Ammonium nitrate fertilizers |
| UN2073 | Ammonia solution, <i>relative density less than 0.880 at 15° C in water, with more than 35 percent but not more than 50 percent ammonia</i> |
| UN2074 | Acrylamide, solid |
| UN2075 | Chloral, anhydrous, inhibited |
| UN2076 | Cresols, liquid |
| UN2077 | alpha-Naphthylamine |
| UN2078 | Toluene diisocyanate |
| UN2079 | Diethylenetriamine |
| UN2186 | Hydrogen chloride, refrigerated liquid |
| UN2187 | Carbon dioxide, refrigerated liquid |
| UN2188 | Arsine |
| UN2189 | Dichlorosilane |
| UN2190 | Oxygen difluoride, compressed |
| UN2191 | Sulfuryl fluoride |
| UN2192 | Germane |
| UN2193 | Hexafluoroethane, compressed <i>or</i> Refrigerant gas R 116 |
| UN2194 | Selenium hexafluoride |
| UN2195 | Tellurium hexafluoride |
| UN2196 | Tungsten hexafluoride |
| UN2197 | Hydrogen iodide, anhydrous |
| UN2198 | Phosphorus pentafluoride, compressed |
| UN2199 | Phosphine |
| UN2200 | Propadiene, inhibited |
| UN2201 | Nitrous oxide, refrigerated liquid |
| UN2202 | Hydrogen selenide, anhydrous |
| UN2203 | Silane, compressed |
| UN2204 | Carbonyl sulfide |
| UN2205 | Adiponitrile |
| UN2206 | Isocyanates, toxic, n.o.s. <i>or</i> Isocyanate solutions, toxic, n.o.s. flashpoint more than 61° C and boiling point less than 300° C |
| UN2208 | Calcium hypochlorite mixtures, dry, <i>with more than 10 percent but not more than 39 percent available chlorine</i> |
| UN2209 | Formaldehyde, solutions, <i>with not less than 25 percent formaldehyde</i> |
| UN2210 | Maneb <i>or</i> Maneb preparations <i>with not less than 60 percent maneb</i> |
| UN2211 | Polymeric beads, expandable, <i>evolving flammable vapor</i> |
| NA2212 | Asbestos |
| UN2212 | Blue asbestos (Crocidolite) <i>or</i> Brown asbestos (amosite, mysorite) |
| UN2213 | Paraformaldehyde |
| UN2214 | Phthalic anhydride <i>with more than .05 percent maleic anhydride</i> |
| NA2215 | Maleic acid |

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| UN2215 | Maleic anhydride |
| UN2216 | Fish meal, stabilized <i>or</i> Fish scrap, stabilized |
| UN2217 | Seed cake <i>with not more than 1.5 percent oil and not more than 11 percent moisture</i> |
| UN2218 | Acrylic acid, stabilized |
| UN2219 | Allyl glycidyl ether |
| UN2222 | Anisole |
| UN2224 | Matches, fusee <i>or</i> Benzonitrile |
| UN2225 | Benzene sulfonyl chloride |
| UN2226 | Benzotrichloride |
| UN2227 | n-Butyl methacrylate, stabilized |
| UN2232 | 2-Chloroethanal |
| UN2233 | Chloroanisidines |
| UN2234 | Chlorobenzotrifluorides |
| UN2235 | Chlorobenzyl chlorides, liquid |
| UN2236 | 3-Chloro-4-methylphenyl isocyanate, liquid |
| UN2237 | Chloronitroanilines |
| UN2238 | Chlorotoluenes |
| UN2239 | Chlorotoluidines, solid |
| UN2240 | Chromosulfuric acid |
| UN2241 | Cycloheptane |
| UN2242 | Cycloheptene |
| UN2243 | Cyclohexyl acetate |
| UN2244 | Cyclopentanol |
| UN2245 | Cyclopentanone |
| UN2246 | Cyclopentene |
| UN2248 | Di-n-butylamine |
| UN2249 | Dichlorodimethyl ether, symmetrical |
| UN2250 | Dichlorophenyl isocyanates |
| UN2251 | Bicyclo [2,2,1] hepta-2, 5-diene, stabilized <i>or</i> 2,5-Norbornadiene, stabilized |
| UN2252 | 1,2-Dimethoxyethane |
| UN2253 | N,N-Dimethylaniline |
| UN2254 | Matches, fusee |
| UN2256 | Cyclohexene |
| UN2257 | Potassium |
| UN2258 | 1,2-Propylenediamine |
| UN2259 | Triethylenetetramine |
| UN2260 | Tripropylamine |
| UN2261 | Xylenols, solid |
| UN2262 | Dimethylcardamoyl chloride |
| UN2263 | Dimethylcyclohexanes |
| UN2264 | N,N-Dimethylcyclohexylamine |
| UN2265 | N,N-Dimethylformamide |
| UN2266 | Dimethyl-N-propylamine |
| UN2267 | Dimethyl thiophosphoryl chloride |
| UN2269 | 3,3'-Iminodipropylamine |
| UN2270 | Ethylamine, aqueous solution <i>with not less than 50 percent but not more than 70 percent ethylamine</i> |

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| UN2271 | Ethyl amyl ketone |
| UN2272 | N-Ethylaniline |
| UN2273 | 2-Ethylaniline |
| UN2274 | N-Ethyl-N-benzylaniline |
| UN2275 | 2-Ethylbutanol |
| UN2276 | 2-Ethylhexylamine |
| UN2277 | Ethyl methacrylate, stabilized |
| UN2278 | n-Heptane |
| UN2279 | Hexachlorobutadiene |
| UN2280 | Hexamethylenediamine, solid |
| UN2281 | Hexamethylene diisocyanate |
| UN2282 | Hexanols |
| UN2283 | Isobutyl methacrylate, inhibited |
| UN2284 | Isobutyronitrile |
| UN2285 | Isocyanatobenzotrifluorides |
| UN2286 | Pentamethylheptane |
| UN2287 | Isoheptenes |
| UN2288 | Isohexenes |
| UN2289 | Isophoronediamine |
| UN2290 | Isophorone diisocyanate |
| UN2291 | Lead compounds, soluble, n.o.s. |
| UN2293 | 4-Methoxy-4-methylpentan-2-one |
| UN2294 | N-Methylaniline |
| UN2295 | Methyl chloroacetate |
| UN2296 | Methylcyclohexane |
| UN2297 | Methylcyclohexanone |
| UN2298 | Methylcyclopentane |
| UN2299 | Methyl dichloroacetate |
| UN2300 | 2-Methyl-5-ethylpyridine |
| UN2301 | 2-Methylfuran |
| UN2302 | 5-Methylhexan-2-one |
| UN2303 | Isopropenylbenzene |
| UN2304 | Naphthalene, molten |
| UN2305 | Nitrobenzenesulfonic acid |
| UN2306 | Nitrobenzotrifluorides |
| UN2307 | 3-Nitro-4-chlorobenzotrifluoride |
| UN2308 | Nitrosylsulfuric acid |
| UN2309 | Octadiene |
| UN2310 | Pentane-2,4-dione |
| UN2311 | Phenetidines |
| UN2312 | Phenol, molten |
| UN2313 | Picolines |
| UN2315 | Polychlorinated biphenyls, liquid <i>or solid</i> |
| UN2316 | Sodium cuprocyanide, solid |
| UN2317 | Sodium cuprocyanide, solution |
| UN2318 | Sodium hydrosulfide, <i>with less than 25 percent water of crystallization</i> |

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| UN2319 | Terpene hydrocarbons, n.o.s. |
| UN2320 | Tetraethylenepentamine |
| UN2321 | Trichlorobenzenes, liquid |
| UN2322 | Trichlorobutene |
| UN2323 | Triethyl phosphite |
| UN2324 | Triisobutylene |
| UN2325 | 1,3,5-Trimethylbenzene |
| UN2326 | Trimethylcyclohexylamine |
| UN2327 | Trimethylhexamethylenediamines |
| UN2328 | Trimethylhexamethylene diisocyanate |
| UN2329 | Trimethyl phosphite |
| UN2330 | Undecane |
| UN2331 | Zinc chloride, anhydrous |
| UN2332 | Acetaldehyde oxime |
| UN2333 | Allyl acetate |
| UN2334 | Allylamine |
| UN2335 | Allyl ethyl ether |
| UN2336 | Allyl formate |
| UN2337 | Phenyl mercaptan |
| UN2338 | Benzotrifluoride |
| UN2339 | 2-Bromobutane |
| UN2340 | 2-Bromoethyl ethyl ether |
| UN2341 | 1-Bromo-3-methylbutane |
| UN2342 | Bromomethylpropanes |
| UN2343 | 2-Bromopentane |
| UN2344 | Bromopropanes |
| UN2345 | 3-Bromopropyne |
| UN2346 | Butanedione |
| UN2347 | Butyl mercaptans |
| UN2348 | Butyl acrylates, stabilized |
| UN2350 | Butyl methyl ether |
| UN2351 | Butyl nitrites |
| UN2352 | Butyl vinyl ether, stabilized |
| UN2353 | Butyryl chloride |
| UN2354 | Chloromethyl ethyl ether |
| UN2356 | 2-Chloropropane |
| UN2357 | Cyclohexylamine |
| UN2358 | Cyclooctatetraene |
| UN2359 | Diallylamine |
| UN2360 | Diallylether |
| UN2361 | Diisobutylamine |
| UN2362 | 1,1-Dichloroethane |
| UN2363 | Ethyl mercaptan |
| UN2364 | n-Propyl benzene |
| UN2366 | Diethyl carbonate |
| UN2367 | alpha-Methylvaleraldehyde |

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| UN2368 | alpha-Pinene |
| UN2370 | 1-Hexene |
| UN2371 | Isopentenenes |
| UN2372 | 1,2-Di-(dimethylamino)ethane |
| UN2373 | Diethoxymethane |
| UN2374 | 3,3-Diethoxypropene |
| UN2375 | Diethyl sulfide |
| UN2376 | 2,3-Dihydropyran |
| UN2377 | 1,1-Dimethoxyethane |
| UN2378 | N-Butylaniline or 2-Dimethylaminoacetonitrile |
| UN2379 | 1,3-Dimethylbutylamine |
| UN2380 | Dimethyldiethoxysilane |
| UN2381 | Dimethyl disulfide |
| UN2382 | Dimethylhydrazine, symmetrical |
| UN2383 | Dipropylamine |
| UN2384 | Di-n-propyl ether |
| UN2385 | Ethyl isobutyrate |
| UN2386 | 1-Ethylpiperidine |
| UN2387 | Fluorobenzene |
| UN2388 | Fluorotoluenes |
| UN2389 | Furan |
| UN2390 | 2-Iodobutane |
| UN2391 | Iodomethylpropanes |
| UN2392 | Iodopropanes |
| UN2393 | Isobutyl formate |
| UN2394 | Isobutyl propionate |
| UN2395 | Isobutyryl chloride |
| UN2396 | Methacrylaldehyde, inhibited |
| UN2397 | 3-Methylbutan-2-one |
| UN2398 | Methyl tert-butyl ether |
| UN2399 | 1-Methylpiperidine |
| UN2400 | Methyl isovalerate |
| UN2401 | Piperidine |
| UN2402 | Propanethiols |
| UN2403 | Isopropenyl acetate |
| UN2404 | Propionitrile |
| UN2405 | Isopropyl butyrate |
| UN2406 | Isopropyl isobutyrate |
| UN2407 | Isopropyl chloroformate |
| UN2409 | Isopropyl propionate |
| UN2410 | 1,2,3,6-Tetrahydropyridine |
| UN2411 | Butyronitrile |
| UN2412 | Tetrahydrothiophene |
| UN2413 | Tetrapropylorthotitanate |
| UN2414 | Thiophene |
| UN2416 | Trimethyl borate |

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| UN2417 | Carbonyl fluoride |
| UN2418 | Sulfur tetrafluoride |
| UN2419 | Bromotrifluoroethylene |
| UN2420 | Hexafluoroacetone |
| UN2421 | Nitrogen trioxide |
| UN2422 | Octafluorobut-2-ene or Refrigerant gas R 1318 |
| UN2424 | Octafluoropropane or Refrigerant gas R 218 |
| UN2426 | Ammonium nitrate, liquid (<i>hot concentrated solution</i>) |
| UN2427 | Potassium chlorate, aqueous solution |
| UN2428 | Sodium chlorate, aqueous solution |
| UN2429 | Calcium chlorate aqueous solution |
| UN2430 | Alkylphenols, solid, n.o.s. (<i>including C2–C12 homologues</i>) |
| UN2431 | Anisidines |
| UN2432 | N,N-Diethylaniline |
| UN2433 | Chloronitrotoluenes, liquid |
| UN2434 | Dibenzylchlorosilane |
| UN2435 | Ethylphenylchlorosilane |
| UN2436 | Thioacetic acid |
| UN2437 | Methylphenylchlorosilane |
| UN2438 | Trimethylacetyl chloride |
| UN2439 | Sodium hydrogendifluoride, solid or Sodium hydrogendifluoride, solution |
| UN2440 | Stannic chloride, pentahydrate |
| UN2441 | Titanium trichloride, pyrophoric or Titanium trichloride mixtures, pyrophoric |
| UN2442 | Trichloroacetyl chloride |
| UN2443 | Vanadium oxytrichloride |
| UN2444 | Vanadium tetrachloride |
| UN2445 | Lithium alkyls |
| UN2446 | Nitrocresols |
| UN2447 | Phosphorus white, molten |
| NA2448 | Sulfur, molten |
| UN2448 | Sulfur, molten |
| UN2451 | Nitrogen trifluoride, compressed |
| UN2452 | Ethylacetylene, stabilized |
| UN2453 | Ethyl fluoride or Refrigerant gas R 161 |
| UN2454 | Methyl fluoride, or Refrigerant gas R 41 |
| UN2456 | 2-Chloropropene |
| UN2457 | 2,3-Dimethylbutane |
| UN2458 | Hexadienes |
| UN2459 | 2-Methyl-1-butene |
| UN2460 | 2-Methyl-2-butene |
| UN2461 | Methylpentadienes |
| UN2463 | Aluminum hydride |
| UN2464 | Beryllium nitrate |
| UN2465 | Dichloroisocyanuric acid, dry or Dichloroisocyanuric acid salts |
| UN2466 | Potassium superoxide |
| UN2468 | Trichloroisocyanuric acid, dry |

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| UN2469 | Zinc bromate |
| UN2470 | Phenylacetonitrile, liquid |
| UN2471 | Osmium tetroxide |
| UN2473 | Sodium arsanilate |
| UN2474 | Thiophosgene |
| UN2475 | Vanadium trichloride |
| UN2477 | Methyl isothiocyanate |
| UN2478 | Isocyanates, flammable, toxic, n.o.s. <i>or</i> Isocyanate solutions, flammable, toxic, n.o.s. <i>flashpoint less than 23° C</i> |
| UN2480 | Methyl isocyanate |
| UN2481 | Ethyl isocyanate |
| UN2482 | n-Propyl isocyanate |
| UN2483 | Isopropyl isocyanate |
| UN2484 | tert-Butyl isocyanate |
| UN2485 | n-Butyl isocyanate |
| UN2486 | Isobutyl isocyanate |
| UN2487 | Phenyl isocyanate |
| UN2488 | Cyclohexyl isocyanate |
| UN2490 | Dichlorodisopropyl ether |
| UN2491 | Ethanolamine <i>or</i> Ethanolamine solutions |
| UN2493 | Hexamethyleneimine |
| UN2495 | Iodine pentafluoride |
| UN2496 | Propionic anhydride |
| UN2498 | 1,2,3,6-Tetrahydrobenzaldehyde |
| UN2501 | Tris-(1-aziridinyl)phosphine oxide, solution |
| UN2502 | Valeryl chloride |
| UN2503 | Zirconium tetrachloride |
| UN2504 | Tetrabromoethane |
| UN2505 | Ammonium fluoride |
| UN2506 | Ammonium hydrogen sulfate |
| UN2507 | Chloroplatinic acid, solid |
| UN2508 | Molybdenum pentachloride |
| UN2509 | Potassium hydrogen sulfate |
| UN2511 | 2-Chloropropionic acid |
| UN2512 | Aminophenols (<i>o</i> -; <i>m</i> -; <i>p</i> -) |
| UN2513 | Bromoacetyl bromide |
| UN2514 | Bromobenzene |
| UN2515 | Bromoform |
| UN2516 | Carbon tetrabromide |
| UN2517 | 1-Chloro-1,1-difluoroethane <i>or</i> Refrigerant gas R 142b |
| UN2518 | 1,5,9-Cyclododecatriene |
| UN2520 | Cyclooctadienes |
| UN2521 | Diketene, stabilized |
| UN2522 | 2-Dimethylaminoethyl methacrylate |
| UN2524 | Ethyl orthoformate |
| UN2525 | Ethyl oxalate |

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| UN2526 | Furfurylamine |
| UN2527 | Isobutyl acrylate, inhibited |
| UN2528 | Isobutyl isobutyrate |
| UN2529 | Isobutyric acid |
| UN2530 | Isobutyric anhydride |
| UN2531 | Methacrylic acid, inhibited |
| UN2533 | Methyl trichloroacetate |
| UN2534 | Methylchlorosilane |
| UN2535 | 4-Methylmorpholine <i>or</i> n-methylmorpholine |
| UN2536 | Methyltetrahydrofuran |
| UN2538 | Nitronaphthalene |
| UN2541 | Terpinolene |
| UN2542 | Tributylamine |
| UN2545 | Hafnium powder, dry |
| UN2546 | Titanium powder, dry |
| UN2547 | Sodium superoxide |
| UN2548 | Chlorine pentafluoride |
| UN2552 | Hexafluoroacetone hydrate |
| UN2554 | Methyl allyl chloride |
| UN2555 | Nitrocellulose with water <i>with not less than 25 percent water, by mass</i> |
| UN2556 | Nitrocellulose, with alcohol with not less than 25 percent alcohol, by mass, and with not more than 12.6 percent nitrogen, by dry mass |
| UN2557 | Nitrocellulose, <i>with not more than 12.6 percent nitrogen, by dry mass, or</i> Nitrocellulose mixture with pigment <i>or</i> Nitrocellulose mixture with plasticizer <i>or</i> Nitrocellulose mixture with pigment and plasticizer |
| UN2558 | Epibromohydrin |
| UN2560 | 2-Methylpentan-2-ol |
| UN2561 | 3-Methyl-1-butene |
| UN2564 | Trichloroacetic acid, solution |
| UN2565 | Dicyclohexylamine |
| UN2567 | Sodium pentachlorophenate |
| UN2570 | Cadmium compounds |
| UN2571 | Alkylsulfuric acids |
| UN2572 | Phenylhydrazine |
| UN2573 | Thallium chlorate |
| UN2574 | Tricresyl phosphate <i>with more than 3 percent ortho isomer</i> |
| UN2576 | Phosphorus oxybromide, molten |
| UN2577 | Phenylacetyl chloride |
| UN2578 | Phosphorus trioxide |
| UN2579 | Piperazine |
| UN2580 | Aluminum bromide, solution |
| UN2581 | Aluminum chloride, solution |
| UN2582 | Ferric chloride, solution |
| UN2583 | Alkyl sulfonic acids, solid <i>or</i> Aryl sulfonic acids, solid <i>with more than 5 percent free sulfuric acid</i> |
| UN2584 | Alkyl sulfonic acids, liquid <i>or</i> Aryl sulfonic acids, liquid <i>with more than 5 percent free sulfuric acid</i> |
| UN2585 | Alkyl sulfonic acids, solid <i>or</i> Aryl sulfonic acids, solid <i>with not more than 5 percent free sulfuric acid</i> |

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| UN2586 | Alkyl sulfonic acids, liquid <i>or</i> Aryl sulfonic acids, liquid <i>with not more than 5 percent free sulfuric acid</i> |
| UN2587 | Benzoquinone |
| UN2588 | Pesticides, solid, toxic, n.o.s. |
| UN2589 | Vinyl chloroacetate |
| UN2590 | White asbestos (<i>chrysotile, actinolite, anthophyllite, tremolite</i>) |
| UN2591 | Xenon, refrigerated liquid (<i>cryogenic liquids</i>) |
| UN2599 | Chlorotrifluoromethane and trifluoromethane azeotropic mixture <i>or</i> Refrigerant gas R 503 <i>with approximately 60 percent chlorotrifluoromethane</i> |
| UN2601 | Cyclobutane |
| UN2602 | Dichlorodifluoromethane and difluoroethane azeotropic mixture <i>or</i> Refrigerant gas R 500 <i>with approximately 74 percent dichlorodifluoromethane</i> |
| UN2603 | Cycloheptatriene |
| UN2604 | Boron trifluoride diethyl etherate |
| UN2605 | Methoxymethyl isocyanate |
| UN2606 | Methyl orthosilicate |
| UN2607 | Acrolein dimer, stabilized |
| UN2608 | Nitropropanes |
| UN2609 | Triallyl borate |
| UN2610 | Triallylamine |
| UN2611 | Propylene chlorohydrin |
| UN2612 | Methyl propyl ether |
| UN2614 | Methallyl alcohol |
| UN2615 | Ethyl propyl ether |
| UN2616 | Triisopropyl borate |
| UN2617 | Methylcyclohexanols, <i>flammable</i> |
| UN2618 | Vinyltoluenes, stabilized |
| UN2619 | Benzyl dimethylamine |
| UN2620 | Amyl butyrates |
| UN2621 | Acetyl methyl carbinol |
| UN2622 | Glycidaldehyde |
| UN2623 | Firelighters, solid <i>with flammable liquid</i> |
| UN2624 | Magnesium silicide |
| UN2626 | Chloric acid aqueous solution, <i>with not more than 10 percent chloric acid</i> |
| UN2627 | Nitrites, inorganic, n.o.s. |
| UN2628 | Potassium fluoroacetate |
| UN2629 | Sodium fluoroacetate |
| NA2630 | Sodium selenite |
| UN2630 | Selenates <i>or</i> Selenites |
| UN2642 | Fluoroacetic acid |
| UN2643 | Methyl bromoacetate |
| UN2644 | Methyl iodide |
| UN2645 | Phenacyl bromide |
| UN2646 | Hexachlorocyclopentadiene |
| UN2647 | Malononitrile |
| UN2648 | 1,2-Dibromobutan-3-one |
| UN2649 | 1,3-Dichloroacetone |

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| UN2650 | 1,1-Dichloro-1-nitroethane |
| UN2651 | 4,4'-Diaminodiphenyl methane |
| UN2653 | Benzyl iodide |
| UN2655 | Potassium fluorosilicate |
| UN2656 | Quinoline |
| UN2657 | Selenium disulfide |
| UN2659 | Sodium chloroacetate |
| UN2660 | Nitrotoluidines (mono) |
| UN2661 | Hexachloroacetone |
| UN2662 | Hydroquinone |
| UN2664 | Dibromomethane |
| UN2667 | Butyltoluenes |
| UN2668 | Chloroacetonitrile |
| UN2669 | Chlorocresols, solution |
| UN2670 | Cyanuric chloride |
| UN2671 | Aminopyridines (<i>o</i> -; <i>m</i> -; <i>p</i> -) |
| UN2672 | Ammonia solution, <i>relative density between 0.880 and 0.957 at 15° C in water, with more than 10 percent but not more than 35 percent ammonia</i> |
| UN2673 | 2-Amino-4-chlorophenol |
| UN2674 | Sodium fluorosilicate |
| UN2676 | Stibine |
| UN2677 | Rubidium hydroxide solution |
| UN2678 | Rubidium hydroxide |
| UN2679 | Lithium hydroxide, solution |
| UN2680 | Lithium hydroxide, monohydrate <i>or</i> Lithium hydroxide, solid |
| UN2681 | Caesium hydroxide solution |
| UN2682 | Caesium hydroxide |
| UN2683 | Ammonium sulfide solution |
| UN2684 | Diethylaminopropylamine |
| UN2685 | N,N-Diethylethylenediamine |
| UN2686 | 2-Diethylaminoethanol |
| UN2687 | Dicyclohexylammonium nitrate |
| UN2688 | 1-Bromo-3-chloropropane |
| UN2689 | Glycerol alpha-monochlorohydrin |
| UN2690 | N-n-Butyl imidazole |
| UN2691 | Phosphorus pentabromide |
| UN2692 | Boron tribromide |
| UN2693 | Bisulfites, aqueous solutions, n.o.s. |
| UN2698 | Tetrahydrophthalic anhydrides <i>with more than 0.05 percent of maleic anhydride</i> |
| UN2699 | Trifluoroacetic acid |
| UN2705 | 1-Pentol |
| UN2707 | Dimethyldioxanes |
| UN2709 | Butyl benzenes |
| UN2710 | Dipropyl ketone |
| UN2713 | Acridine |
| UN2714 | Zinc resinate |

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| UN2715 | Aluminum resinate |
| UN2716 | 1,4-Butynediol |
| UN2717 | Camphor, synthetic |
| UN2719 | Barium bromate |
| UN2720 | Chromium nitrate |
| UN2721 | Copper chlorate |
| UN2722 | Lithium nitrate |
| UN2723 | Magnesium chlorate |
| UN2724 | Manganese nitrate |
| UN2725 | Nickel nitrate |
| UN2726 | Nickel nitrite |
| UN2727 | Thallium nitrate |
| UN2728 | Zirconium nitrate |
| UN2729 | Hexachlorobenzene |
| UN2730 | Nitroanisoie |
| UN2732 | Nitrobromobenzenes liquid <i>or</i> Nitrobromobenzenes solid |
| UN2733 | Amine, flammable, corrosive, n.o.s. <i>or</i> Polyamines, flammable, corrosive, n.o.s. |
| UN2734 | Amine, liquid, corrosive, flammable, n.o.s. <i>or</i> Polyamines, liquid, corrosive, flammable, n.o.s. |
| UN2735 | Amines, liquid, corrosive, n.o.s. <i>or</i> Polyamines, liquid, corrosive, n.o.s. |
| UN2739 | Butyric anhydride |
| UN2740 | n-Propyl chloroformate |
| UN2741 | Barium hypochlorite <i>with more than 22 percent available chlorine</i> |
| NA2742 | sec-Butyl chloroformate <i>or</i> Isobutyl chloroformate |
| UN2742 | Chloroformates, toxic, corrosive, flammable, n.o.s. |
| UN2743 | n-Butyl chloroformate |
| UN2744 | Cyclobutyl chloroformate |
| UN2745 | Chloromethyl chloroformate |
| UN2746 | Phenyl chloroformate |
| UN2747 | tert-Butylcyclohexylchloroformate |
| UN2748 | 2-Ethylhexyl chloroformate |
| UN2749 | Tetramethylsilane |
| UN2750 | 1,3-Dichloropropanol-2 |
| UN2751 | Diethylthiophosphoryl chloride |
| UN2752 | 1,2-Epoxy-3-ethoxypropane |
| UN2753 | N-Ethylbenzyltoluidines liquid |
| UN2754 | N-Ethyltoluidines |
| UN2757 | Carbamate pesticides, solid, toxic |
| UN2758 | Carbamate pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i> |
| UN2759 | Arsenical pesticides, solid, toxic |
| UN2760 | Arsenical pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i> |
| NA2761 | Aldrin, solid <i>or</i> Dieldrin |
| UN2761 | Organochlorine pesticides, solid, toxic |
| NA2762 | Aldrin, liquid |
| UN2762 | Organochlorine pesticides liquid, flammable, toxic, <i>flashpoint less than 23° C</i> |
| UN2763 | Triazine pesticides, solid, toxic |
| UN2764 | Triazine pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i> |

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| UN2771 | Thiocarbamate pesticides, solid, toxic |
| UN2772 | Thiocarbamate pesticide, liquid, flammable, toxic, <i>flashpoint less than 23° C</i> |
| UN2775 | Copper based pesticides, solid, toxic |
| UN2776 | Copper based pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i> |
| UN2777 | Mercury based pesticides, solid, toxic |
| UN2778 | Mercury based pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i> |
| UN2779 | Substituted nitrophenol pesticides, solid, toxic |
| UN2780 | Substituted nitrophenol pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i> |
| UN2781 | Bipyridilium pesticides, solid, toxic |
| UN2782 | Bipyridilium pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i> |
| UN2783 | Organophosphorus pesticides, solid, toxic |
| UN2784 | Organophosphorus pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i> |
| UN2785 | 4-Thiapentanal |
| UN2786 | Organotin pesticides, solid, toxic |
| UN2787 | Organotin pesticides, liquid, <i>flammable, toxic, flashpoint less than 23° C</i> |
| UN2788 | Organotin compounds, liquid, n.o.s. |
| UN2789 | Acetic acid, glacial <i>or</i> Acetic acid solution, <i>with more than 80 percent acid, by mass</i> |
| UN2790 | Acetic acid solution, <i>not less than 50 percent but not more than 80 percent acid, by mass or</i> Acetic acid solution, <i>with more than 10 percent and less than 50 percent acid, by mass</i> |
| UN2793 | Ferrous metal borings <i>or</i> Ferrous metal shavings <i>or</i> Ferrous metal turnings <i>or</i> Ferrous metal cuttings <i>in a form liable to self-heating</i> |
| UN2794 | Batteries, wet, filled with acid, <i>electric storage</i> |
| UN2795 | Batteries, wet, filled with alkali, <i>electric storage</i> |
| UN2796 | Sulfuric acid <i>with not more than 51 percent acid or</i> Battery fluid, acid |
| UN2797 | Battery fluid, alkali |
| UN2798 | Phenyl phosphorus dichloride |
| UN2799 | Phenyl phosphorus thiodichloride |
| UN2800 | Batteries, wet, non-spillable, <i>electric storage</i> |
| UN2801 | Dyes, liquid, corrosive, n.o.s. <i>or</i> Dye intermediates, liquid, corrosive, n.o.s. |
| UN2802 | Copper chloride |
| UN2803 | Gallium |
| UN2805 | Lithium hydride, fused solid |
| UN2806 | Lithium nitride |
| UN2809 | Mercury <i>or</i> Mercury contained in manufactured articles |
| UN2810 | Toxic, liquids, organic, n.o.s. |
| NA2811 | Selenium oxide |
| UN2811 | Toxic solids, organic, n.o.s. |
| UN2812 | Sodium aluminate, solid |
| UN2813 | Water-reactive solid, n.o.s. |
| UN2814 | Infectious substances, affecting humans only |
| UN2815 | N-Aminoethylpiperazine |
| UN2817 | Ammonium hydrogendifluoride, solution |
| UN2818 | Ammonium polysulfide, solution |
| UN2819 | Amyl acid phosphate |
| UN2820 | Butyric acid |
| UN2821 | Phenol solutions |

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| UN2822 | 2-Chloropyridine |
| UN2823 | Crotonic acid, <i>solid</i> |
| UN2826 | Ethyl chlorothioformate |
| UN2829 | Caproic acid |
| UN2830 | Lithium ferrosilicon |
| UN2831 | 1,1,1-Trichloroethane |
| UN2834 | Phosphorous acid |
| UN2835 | Sodium aluminum hydride |
| UN2837 | Bisulfate, aqueous solution |
| UN2838 | Vinyl butyrate, stabilized |
| UN2839 | Aldol |
| UN2840 | Butyraldoxime |
| UN2841 | Di-n-amylamine |
| UN2842 | Nitroethane |
| UN2844 | Calcium manganese silicon |
| NA2845 | Ethyl phosphonous dichloride, anhydrous <i>pyrophoric liquid</i> |
| UN2845 | Pyrophoric liquids, organic, n.o.s. |
| UN2846 | Pyrophoric solids, organic, n.o.s. |
| UN2849 | 3-Chloropropanol-1 |
| UN2850 | Propylene tetramer |
| UN2851 | Boron trifluoride dihydrate |
| UN2852 | Dipicryl sulfide, wetted <i>with not less than 10 percent water, by mass</i> |
| UN2853 | Magnesium fluorosilicate |
| UN2854 | Ammonium fluorosilicate |
| UN2855 | Zinc fluorosilicate |
| UN2856 | Fluorosilicates, n.o.s. |
| UN2857 | Refrigerating machines, <i>containing nonflammable, nontoxic, liquified gas or ammonia solution (UN2672)</i> |
| UN2858 | Zirconium, dry, <i>coiled wire, finished metal sheets, strip (thinner than 254 microns but not thinner than 18 microns)</i> |
| UN2859 | Ammonium metavanadate |
| UN2861 | Ammonium polyvanadate |
| UN2862 | Vanadium pentoxide, <i>nonfused form</i> |
| UN2863 | Sodium ammonium vanadate |
| UN2864 | Potassium metavanadate |
| UN2865 | Hydroxylamine sulfate |
| UN2869 | Titanium trichloride mixtures |
| UN2870 | Aluminum borohydride <i>or</i> Aluminum borohydride in devices |
| UN2871 | Antimony powder |
| UN2872 | Dibromochloropropane |
| UN2873 | Dibutylaminoethanol |
| UN2874 | Furfuryl alcohol |
| UN2875 | Hexachlorophene |
| UN2876 | Resorcinol |
| UN2878 | Titanium sponge granules <i>or</i> Titanium sponge powders |
| UN2879 | Selenium oxychloride |

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| UN2880 | Calcium hypochlorite, hydrated <i>or</i> Calcium hypochlorite, hydrated mixtures, <i>with not less than 5.5 percent but not more than 16 percent water</i> |
| UN2881 | Metal catalyst, dry |
| UN2900 | Infectious substances, affecting animals <i>only</i> |
| UN2901 | Bromine chloride |
| UN2902 | Pesticides, liquid, toxic, n.o.s. |
| UN2903 | Pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i> |
| UN2904 | Chlorophenolates, liquid <i>or</i> Phenolates, liquid |
| UN2905 | Chlorophenolates, solid <i>or</i> Phenolates, solid |
| UN2907 | Isosorbide dinitrate mixture <i>with not less than 60 percent lactose, mannose, starch or calcium hydrogen phosphate</i> |
| UN2909 | Radioactive material, excepted package—articles manufactured from natural uranium or depleted uranium or natural thorium |
| UN2910 | Radioactive material, excepted package—articles manufactured from natural or depleted uranium or natural thorium <i>or</i> Radioactive material, excepted package—empty package or empty packaging <i>or</i> Radioactive material, excepted package—instruments or articles <i>or</i> Radioactive material, excepted package—limited quantity of material |
| UN2911 | Radioactive material, excepted package—instruments or articles |
| UN2912 | Radioactive material, low specific activity, n.o.s. <i>or</i> Radioactive material, LSA, n.o.s. |
| UN2913 | Radioactive material, surface contaminated object <i>or</i> Radioactive material, SCO |
| UN2918 | Radioactive material, fissile, n.o.s. |
| NA2920 | Dichlorobutene |
| UN2920 | Corrosive liquids, flammable, n.o.s. |
| UN2921 | Corrosive solids, flammable, n.o.s. |
| NA2922 | Sodium hydrosulfide, solution |
| UN2922 | Corrosive liquids, toxic, n.o.s. |
| UN2923 | Corrosive solids, toxic, n.o.s. |
| UN2924 | Flammable liquids, corrosive, n.o.s. |
| UN2925 | Flammable solids, corrosive, organic, n.o.s. |
| UN2926 | Flammable solids, toxic, organic, n.o.s. |
| NA2927 | Ethyl phosphonothioic dichloride, anhydrous <i>or</i> Ethyl phosphorodichloridate |
| UN2927 | Toxic liquids, corrosive, organic, n.o.s. |
| UN2928 | Toxic solids, corrosive, organic, n.o.s. |
| UN2929 | Toxic liquids, flammable, organic, n.o.s. |
| UN2930 | Toxic solids, flammable, organic, n.o.s. |
| UN2931 | Vanadyl sulfate |
| UN2933 | Methyl 2-chloropropionate |
| UN2934 | Isopropyl 2-chloropropionate |
| UN2935 | Ethyl 2-chloropropionate |
| UN2936 | Thiolactic acid |
| UN2937 | alpha-Methylbenzyl alcohol |
| UN2940 | 9-Phosphabicyclononanes <i>or</i> Cyclooctadiene phosphines |
| UN2941 | Fluoroanilines |
| UN2942 | 2-Trifluoromethylaniline |
| UN2943 | Tetrahydrofurfurylamine |
| UN2945 | N-Methylbutylamine |
| UN2946 | 2-Amino-5-diethylaminopentane |

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| UN2947 | Isopropyl chloroacetate |
| UN2948 | 3-Trifluoromethylaniline |
| UN2949 | Sodium hydrosulfide, <i>with not less than 25 percent water of crystallization</i> |
| UN2950 | Magnesium granules, coated <i>particle size not less than 149 microns</i> |
| UN2956 | 5-tert-Butyl-2,4,6-trinitro-m-xylene or Musk xylene |
| UN2965 | Boron trifluoride dimethyl etherate |
| UN2966 | Thioglycol |
| UN2967 | Sulfamic acid |
| UN2968 | Maneb stabilized or Maneb preparations, stabilized <i>against self-heating</i> |
| UN2969 | Castor beans or Castor meal or Castor pomace or Castor flake |
| UN2974 | Radioactive material, special form, n.o.s. |
| UN2982 | Radioactive material, n.o.s. |
| UN2983 | Ethylene oxide and propylene oxide mixtures <i>with not more than 30 percent ethylene oxide</i> |
| UN2984 | Hydrogen peroxide, aqueous solutions <i>with not less than 8 percent but less than 20 percent hydrogen peroxide (stabilized as necessary)</i> |
| UN2985 | Chlorosilanes, flammable, corrosive, n.o.s. |
| UN2986 | Chlorosilanes, corrosive, flammable, n.o.s. |
| UN2987 | Chlorosilanes, corrosive, n.o.s. |
| UN2988 | Chlorosilanes, water-reactive, flammable, corrosive, n.o.s. |
| UN2989 | Lead phosphite, dibasic |
| UN2990 | Life-saving appliances, self-inflating |
| UN2991 | Carbamate pesticide, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i> |
| UN2992 | Carbamate pesticides, liquid, toxic |
| UN2993 | Arsenical pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i> |
| UN2994 | Arsenical pesticides, liquid, toxic |
| UN2995 | Organochlorine pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i> |
| UN2996 | Organochlorine pesticide, liquid, toxic |
| UN2997 | Triazine pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i> |
| UN2998 | Triazine pesticides, liquid, toxic |
| UN3002 | Phenyl urea pesticides, liquid, toxic |
| UN3005 | Thiocarbamate pesticides, liquid, flammable, toxic, <i>flashpoint not less than 23° C</i> |
| UN3006 | Thiocarbamate pesticide, liquid, toxic |
| UN3009 | Copper based pesticides, liquid, toxic, <i>flammable, flashpoint not less than 23° C</i> |
| UN3010 | Copper based pesticides, liquid, toxic |
| UN3011 | Mercury based pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i> |
| UN3012 | Mercury based pesticides, liquid, toxic |
| UN3013 | Substituted nitrophenol pesticides, liquid, toxic flammable <i>flashpoint not less than 23° C</i> |
| UN3014 | Substituted nitrophenol pesticides, liquid, toxic |
| UN3015 | Bipyridilium pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i> |
| UN3016 | Bipyridilium pesticides, liquid, toxic |
| UN3017 | Organophosphorus pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i> |
| UN3018 | Organophosphorus pesticides, liquid, toxic |
| UN3019 | Organotin pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i> |
| UN3020 | Organotin pesticides, liquid, toxic |
| UN3021 | Pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i> |
| UN3022 | 1,2-Butylene oxide, stabilized |

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| UN3023 | 2-Methyl-2-heptanethiol |
| UN3024 | Coumarin derivative pesticides, liquid, flammable, toxic, <i>flashpoint less than 23° C</i> |
| UN3025 | Coumarin derivative pesticides, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i> |
| UN3026 | Coumarin derivative pesticides, liquid, toxic |
| UN3027 | Coumarin derivative pesticides, solid, toxic |
| UN3028 | Batteries, dry, containing potassium hydroxide solid, <i>electric, storage</i> |
| UN3048 | Aluminum phosphide pesticides |
| UN3049 | Metal alkyl halides, water-reactive, n.o.s. or Metal aryl halides, water-reactive, n.o.s. |
| UN3050 | Metal alkyl hydrides, water-reactive, n.o.s. or Metal aryl hydrides, water-reactive, n.o.s. |
| UN3053 | Magnesium alkyls |
| UN3054 | Cyclohexyl mercaptan |
| UN3055 | 2-(2-Aminoethoxy) ethanol |
| UN3056 | n-Heptaldehyde |
| UN3057 | Trifluoroacetyl chloride |
| UN3064 | Nitroglycerin, solution in alcohol, <i>with more than 1 percent but not more than 5 percent nitroglycerin</i> |
| UN3065 | Alcoholic beverages |
| UN3066 | Paint or Paint related material |
| UN3070 | Ethylene oxide and dichlorodifluoromethane mixture <i>with not more than 12.5 percent ethylene oxide</i> |
| UN3071 | Mercaptans, liquid, toxic, flammable, n.o.s. or Mercaptan mixtures, liquid, toxic, flammable, n.o.s., <i>flashpoint not less than 23° C</i> |
| UN3072 | Life-saving appliances, not self-inflating <i>containing dangerous goods as equipment</i> |
| UN3073 | Vinylpyridines, stabilized |
| NA3077 | Hazardous waste, solid, n.o.s. or Other regulated substances, solid, n.o.s. |
| UN3077 | Environmentally hazardous substances, solid, n.o.s. (not including waste) |
| UN3078 | Cerium, <i>turnings or gritty powder</i> |
| UN3079 | Methacrylonitrile, inhibited |
| UN3080 | Isocyanates, toxic, flammable, n.o.s. or Isocyanate solutions, toxic, flammable, n.o.s. <i>flashpoint not less than 23° C but not more than 6° C and boiling point less than 300° C</i> |
| NA3082 | Hazardous waste, liquid, n.o.s. or Other regulated substances, liquid, n.o.s. |
| UN3082 | Environmentally hazardous substances, liquid, n.o.s. (not including waste) |
| UN3083 | Perchloryl fluoride |
| UN3084 | Corrosive solids, oxidizing, n.o.s. |
| UN3085 | Oxidizing solid, corrosive, n.o.s. |
| UN3086 | Toxic solids, oxidizing, n.o.s. |
| UN3087 | Oxidizing solid, toxic, n.o.s. |
| UN3088 | Self-heating solid, organic, n.o.s. |
| UN3089 | Metal powders, flammable, n.o.s. |
| UN3090 | Lithium metal batteries (including lithium alloy batteries) |
| UN3091 | Lithium metal batteries (including lithium alloy batteries) contained in, or packed with, equipment |
| UN3091 | Lithium batteries packed with equipment |
| UN3092 | 1-Methoxy-2-propanol |
| UN3093 | Corrosive liquids, oxidizing, n.o.s. |
| UN3094 | Corrosive liquids, water-reactive, n.o.s. |
| UN3095 | Corrosive solids, self-heating, n.o.s. |
| UN3096 | Corrosive solids, water-reactive, n.o.s. |
| UN3097 | Flammable solid, oxidizing, n.o.s. |

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| UN3098 | Oxidizing liquid, corrosive, n.o.s. |
| UN3099 | Oxidizing liquid, toxic, n.o.s. |
| UN3100 | Oxidizing solid, self-heating, n.o.s. |
| UN3101 | Organic peroxide type B, liquid |
| UN3102 | Organic peroxide type B, solid |
| UN3103 | Organic peroxide type C, liquid |
| UN3104 | Organic peroxide type C, solid |
| UN3105 | Organic peroxide type D, liquid |
| UN3106 | Organic peroxide type D, solid |
| UN3107 | Organic peroxide type E, liquid |
| UN3108 | Organic peroxide type E, solid |
| UN3109 | Organic peroxide type F, liquid |
| UN3110 | Organic peroxide type F, solid |
| UN3111 | Organic peroxide type B, liquid, temperature controlled |
| UN3112 | Organic peroxide type B, solid, temperature controlled |
| UN3113 | Organic peroxide type C, liquid, temperature controlled |
| UN3114 | Organic peroxide type C, solid, temperature controlled |
| UN3115 | Organic peroxide type D, liquid, temperature controlled |
| UN3116 | Organic peroxide type D, solid, temperature controlled |
| UN3117 | Organic peroxide type E, liquid, temperature controlled |
| UN3118 | Organic peroxide type E, solid, temperature controlled |
| UN3119 | Organic peroxide type F, liquid, temperature controlled |
| UN3120 | Organic peroxide type F, solid, temperature controlled |
| UN3121 | Oxidizing solid, water-reactive, n.o.s. |
| UN3122 | Toxic liquids, oxidizing, n.o.s. |
| UN3123 | Toxic liquids, water-reactive, n.o.s. |
| UN3124 | Toxic solids, self-heating, n.o.s. |
| UN3125 | Toxic solids, water-reactive, n.o.s. |
| UN3126 | Self-heating solid, corrosive, organic, n.o.s. |
| UN3127 | Self-heating solid, oxidizing, n.o.s. |
| UN3128 | Self-heating solid, toxic, organic, n.o.s. |
| UN3129 | Water-reactive liquid, corrosive, n.o.s. |
| UN3130 | Water-reactive liquid, toxic, n.o.s. |
| UN3131 | Water-reactive solid, corrosive, n.o.s. |
| UN3132 | Water-reactive solid, flammable, n.o.s. |
| UN3133 | Water-reactive solid, oxidizing, n.o.s. |
| UN3134 | Water-reactive solid, toxic, n.o.s. |
| UN3135 | Water-reactive solid, self-heating, n.o.s. |
| UN3136 | Trifluoromethane, refrigerated liquid |
| UN3137 | Oxidizing solid, flammable, n.o.s. |
| UN3138 | Ethylene, acetylene and propylene in mixture, refrigerated liquid <i>with at least 71.5 percent ethylene with not more than 22.5 percent acetylene and not more than 6 percent propylene</i> |
| UN3139 | Oxidizing liquid, n.o.s. |
| UN3140 | Alkaloids, liquid, n.o.s., or Alkaloid salts, liquid, n.o.s. |
| UN3141 | Antimony compounds, inorganic, liquid, n.o.s. |
| UN3142 | Disinfectants, liquid, toxic, n.o.s. |

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| UN3143 | Dyes, solid, toxic, n.o.s. <i>or</i> Dye intermediates, solid, toxic, n.o.s. |
| UN3144 | Nicotine compounds, liquid, n.o.s. <i>or</i> Nicotine preparations, liquid, n.o.s. |
| UN3145 | Alkylphenols, liquid, n.o.s. (<i>including C2–C12 homologues</i>) |
| UN3146 | Organotin compounds, solid, n.o.s. |
| UN3147 | Dyes, solid, corrosive, n.o.s. <i>or</i> Dye intermediates, solid, corrosive, n.o.s. |
| UN3148 | Water-reactive liquid, n.o.s. |
| UN3149 | Hydrogen peroxide and peroxyacetic acid mixtures, <i>stabilized with acids, water, and not more than 5 percent peroxyacetic acid</i> |
| UN3150 | Devices, small, hydrocarbon gas powered <i>or</i> Hydrocarbon gas refills for small devices <i>with release device</i> |
| UN3151 | Polyhalogenated biphenyls, liquid <i>or</i> Polyhalogenated terphenyls, liquid |
| UN3152 | Polyhalogenated biphenyls, solid <i>or</i> Polyhalogenated terphenyls, solid |
| UN3153 | Perfluoro(methyl vinyl ether) |
| UN3154 | Perfluoro(ethyl vinyl ether) |
| UN3155 | Pentachlorophenol |
| UN3156 | Compressed gas, oxidizing, n.o.s. |
| UN3157 | Liquified gas, oxidizing, n.o.s. |
| UN3158 | Gas, refrigerated liquid, n.o.s. (<i>cryogenic liquid</i>) |
| UN3159 | 1,1,1,2-Tetrafluoroethane <i>or</i> Refrigerant gas R 134a |
| UN3160 | Liquified gas, toxic, flammable, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i> |
| UN3161 | Liquified gas, flammable, n.o.s. |
| UN3162 | Liquified gas, toxic, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i> |
| UN3163 | Liquified gas, n.o.s. |
| UN3164 | Articles, pressurized pneumatic <i>or</i> Hydraulic <i>containing non-flammable gas</i> |
| UN3165 | Aircraft hydraulic power unit fuel tank (<i>containing a mixture of anhydrous hydrazine and monomethyl hydrazine</i>) (M86 fuel) |
| UN3166 | Vehicle, <i>flammable gas powered or</i> Vehicle, fuel cell, flammable gas powered. Vehicle, flammable liquid powered <i>or</i> Vehicle, fuel cell, flammable liquid powered |
| UN3167 | Gas sample, non-pressurized, flammable, n.o.s., <i>not refrigerated liquid</i> |
| UN3168 | Gas sample, non-pressurized, toxic, flammable, n.o.s., <i>not refrigerated liquid</i> |
| UN3169 | Gas sample, non-pressurized, toxic, n.o.s., <i>not refrigerated liquid</i> |
| UN3170 | Aluminum smelting by-products <i>or</i> Aluminum remelting by-products |
| UN3171 | Battery-powered vehicle <i>or</i> Battery-powered equipment |
| UN3172 | Toxins, extracted from living sources, liquid, n.o.s. |
| UN3174 | Titanium disulphide |
| UN3175 | Solids containing flammable liquid, n.o.s. |
| UN3176 | Flammable solid, organic, molten, n.o.s. |
| NA3178 | Smokeless powder for small arms (<i>100 pounds or less</i>) |
| UN3178 | Flammable solid, inorganic, n.o.s. |
| UN3179 | Flammable solid, toxic, inorganic, n.o.s. |
| UN3180 | Flammable solid, corrosive, inorganic, n.o.s. |
| UN3181 | Metal salts of organic compounds, flammable, n.o.s. |
| UN3182 | Metal hydrides, flammable, n.o.s. |
| UN3183 | Self-heating liquid, organic, n.o.s. |
| UN3184 | Self-heating liquid, toxic, organic, n.o.s. |
| UN3185 | Self-heating liquid, corrosive, organic, n.o.s. |
| UN3186 | Self-heating liquid, inorganic, n.o.s. |

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| UN3187 | Self-heating liquid, toxic, inorganic, n.o.s. |
| UN3188 | Self-heating liquid, corrosive, inorganic, n.o.s. |
| UN3189 | Metal powder, self-heating, n.o.s. |
| UN3190 | Self-heating solid, inorganic, n.o.s. |
| UN3191 | Self-heating solid, toxic, inorganic, n.o.s. |
| UN3192 | Self-heating solid, corrosive, inorganic, n.o.s. |
| UN3194 | Pyrophoric liquid, inorganic, n.o.s. |
| UN3200 | Pyrophoric solid, inorganic, n.o.s. |
| UN3203 | Pyrophoric organometallic compound, water-reactive, n.o.s. |
| UN3205 | Alkaline earth metal alcoholates, n.o.s. |
| UN3206 | Alkali metal alcoholates, self-heating, corrosive, n.o.s. |
| UN3207 | Organometallic compound <i>or</i> Compound solution <i>or</i> Compound dispersion, water-reactive, flammable, n.o.s. |
| UN3208 | Metallic substances, water-reactive, n.o.s. |
| UN3209 | Metallic substance, water-reactive, self-heating, n.o.s. |
| UN3210 | Chlorates, inorganic, aqueous solutions, n.o.s. |
| UN3211 | Perchlorates, inorganic, aqueous solution, n.o.s. |
| UN3212 | Hypochlorites, inorganic, n.o.s. |
| UN3213 | Bromates, inorganic, aqueous solution, n.o.s. |
| UN3214 | Permanganates, inorganic, aqueous solution, n.o.s. |
| UN3215 | Persulfates, inorganic, n.o.s. |
| UN3216 | Persulfates, inorganic, aqueous solution, n.o.s. |
| UN3218 | Nitrates, inorganic, aqueous solution, n.o.s. |
| UN3219 | Nitrites, inorganic, aqueous solution, n.o.s. |
| UN3220 | Pentafluoroethane <i>or</i> Refrigerant gas R 125 |
| UN3221 | Self-reactive liquid type B |
| UN3222 | Self-reactive solid type B |
| UN3223 | Self-reactive liquid type C |
| UN3224 | Self-reactive solid type C |
| UN3225 | Self-reactive liquid type D |
| UN3226 | Self-reactive solid type D |
| UN3227 | Self-reactive liquid type E |
| UN3228 | Self-reactive solid type E |
| UN3229 | Self-reactive liquid type F |
| UN3230 | Self-reactive solid type F |
| UN3231 | Self-reactive liquid type B, temperature controlled |
| UN3232 | Self-reactive solid type B, temperature controlled |
| UN3233 | Self-reactive liquid type C, temperature controlled |
| UN3234 | Self-reactive solid type C, temperature controlled |
| UN3235 | Self-reactive liquid type D, temperature controlled |
| UN3236 | Self-reactive solid type D, temperature controlled |
| UN3237 | Self-reactive liquid type E, temperature controlled |
| UN3238 | Self-reactive solid type E, temperature controlled |
| UN3239 | Self-reactive liquid type F, temperature controlled |
| UN3240 | Self-reactive solid type F, temperature controlled |
| UN3241 | 2-Bromo-2-nitropropane-1,3-diol |

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| UN3242 | Azodicarbonamide |
| UN3243 | Solids containing toxic liquid, n.o.s. |
| UN3244 | Solids containing corrosive liquid, n.o.s. |
| UN3246 | Methanesulfonyl chloride |
| UN3247 | Sodium peroxoborate, anhydrous |
| UN3248 | Medicine, liquid, flammable, toxic, n.o.s. |
| UN3249 | Medicine, solid, toxic, n.o.s. |
| UN3250 | Chloroacetic acid, molten |
| UN3251 | Isosorbide-5-mononitrate |
| UN3252 | Difluoromethane <i>or</i> Refrigerant gas R 32 |
| UN3253 | Disodium trioxosilicate |
| UN3254 | Tributylphosphane |
| UN3255 | tert-Butyl hypochlorite |
| UN3256 | Elevated temperature liquid, flammable, n.o.s., <i>with flashpoint above 37.8° C, at or above its flashpoint</i> |
| UN3257 | Elevated temperature liquid, n.o.s., <i>at or above 100° C and below its flashpoint (including molten metals, molten salts, etc.)</i> |
| UN3258 | Elevated temperature solid, n.o.s., <i>at or above 240° C, see 49 CFR 173.247(h)(4)</i> |
| UN3259 | Amines, solid, corrosive, n.o.s. <i>or</i> Polyamines, solid, corrosive, n.o.s. |
| UN3260 | Corrosive solid, acidic, inorganic, n.o.s. |
| UN3261 | Corrosive solid, acidic, organic, n.o.s. |
| UN3262 | Corrosive solid, basic, inorganic, n.o.s. |
| UN3263 | Corrosive solid, basic, organic, n.o.s. |
| UN3264 | Corrosive liquid, acidic, inorganic, n.o.s. |
| UN3265 | Corrosive liquid, acidic, organic, n.o.s. |
| UN3266 | Corrosive liquid, basic, inorganic, n.o.s. |
| UN3267 | Corrosive liquid, basic, organic, n.o.s. |
| UN3268 | Air bag inflators, <i>or</i> Air bag modules, <i>or</i> Seatbelt pretensioners |
| UN3269 | Polyester resin kit |
| UN3270 | Nitrocellulose membrane filters |
| UN3271 | Ethers, n.o.s. |
| UN3272 | Esters, n.o.s. |
| UN3273 | Nitriles, flammable, toxic, n.o.s. |
| UN3274 | Alcoholates solution, n.o.s., <i>in alcohol</i> |
| UN3275 | Nitriles, toxic, flammable, n.o.s. |
| UN3276 | Nitriles, toxic, n.o.s. |
| UN3277 | Chloroformates, toxic, corrosive, n.o.s. |
| UN3278 | Organophosphorus compound, toxic n.o.s. |
| UN3279 | Organophosphorus compound, toxic, flammable, n.o.s. |
| UN3280 | Organoarsenic compound, n.o.s. |
| UN3281 | Metal carbonyls, n.o.s. |
| UN3282 | Organometallic compound, toxic n.o.s. |
| UN3283 | Selenium compound, n.o.s. |
| UN3284 | Tellurium compound, n.o.s. |
| UN3285 | Vanadium compound, n.o.s. |
| UN3286 | Flammable liquid, toxic, corrosive, n.o.s. |

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| UN3287 | Toxic liquid, inorganic, n.o.s. |
| UN3288 | Toxic solid, inorganic, n.o.s. |
| UN3289 | Toxic liquid, corrosive, inorganic, n.o.s. |
| UN3290 | Toxic solid, corrosive, inorganic, n.o.s. |
| UN3291 | Regulated medical waste (sharp) <i>or</i> Regulated medical waste (<i>non-sharp</i>) |
| UN3292 | Batteries, containing sodium <i>or</i> Cells, containing sodium |
| UN3293 | Hydrazine, aqueous solution <i>with not more than 37 percent hydrazine, by mass</i> |
| UN3294 | Hydrogen, cyanide, solution in alcohol <i>with not more than 45 percent hydrogen cyanide</i> |
| UN3295 | Hydrocarbons, liquid, n.o.s. |
| UN3296 | Heptafluoropropane <i>or</i> Refrigerant gas R 227 |
| UN3297 | Ethylene oxide and chlorotetrafluoroethane mixture <i>with not more than 8.8 percent ethylene oxide</i> |
| UN3298 | Ethylene oxide and pentafluoroethane mixture <i>with not more than 7.9 percent ethylene oxide</i> |
| UN3299 | Ethylene oxide and tetrafluoroethane mixture <i>with not more than 5.6 percent ethylene oxide</i> |
| UN3300 | Ethylene oxide and carbon dioxide mixtures <i>with more than 87 percent ethylene oxide</i> |
| UN3301 | Corrosive liquids, self-heating, n.o.s. |
| UN3302 | 2-Dimethylaminoethyl acrylate |
| UN3303 | Compressed gas, toxic, oxidizing, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i> |
| UN3304 | Compressed gas, toxic, corrosive, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i> |
| UN3305 | Compressed gas, toxic, flammable, corrosive, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i> |
| UN3306 | Compressed gas, toxic, oxidizing, corrosive, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i> |
| UN3307 | Liquified gas, toxic, oxidizing, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i> |
| UN3308 | Liquified gas, toxic, corrosive, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i> |
| UN3309 | Liquified gas, toxic, flammable, corrosive, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i> |
| UN3310 | Liquified gas, toxic, oxidizing, corrosive, n.o.s. <i>Inhalation Hazard Zone A, B, C, or D</i> |
| UN3311 | Gas, refrigerated liquid, oxidizing, n.o.s. (<i>cryogenic liquid</i>) |
| UN3312 | Gas, refrigerated liquid, flammable, n.o.s. (<i>cryogenic liquid</i>) |
| UN3313 | Organic pigments, self-heating |
| UN3314 | Plastic molding compound <i>in dough, sheet, or extruded rope form evolving flammable vapor</i> |
| UN3316 | First aid kits |
| UN3317 | 2-Amino-4,6-Dinitrophenol, wetted <i>with not less than 20 percent water by mass</i> |
| UN3318 | Ammonia solution, <i>relative density less than 0.880 at 15° C in water, with more than 50 percent ammonia</i> |
| UN3319 | Nitroglycerin mixture, <i>desensitized, solid, n.o.s. with more than 2 percent but not more than 10 percent nitroglycerin, by mass</i> |
| UN3320 | Sodium borohydride and sodium hydroxide solution, <i>with not more than 12 percent sodium borohydride and not more than 40 percent sodium hydroxide by mass</i> |
| UN3423 | Tetramethylammonium hydroxide, solid |
| NA3334 | Self-defense spray, non-pressurized |
| UN3334 | Aviation regulated liquid, n.o.s. |
| UN3335 | Aviation regulated solid, n.o.s. |
| UN3336 | Mercaptans, liquid, flammable, n.o.s. <i>or</i> Mercaptan mixture, liquid, flammable, n.o.s. |
| UN3337 | Refrigerant gas R 404A |
| UN3338 | Refrigerant gas R 407A |
| UN3339 | Refrigerant gas R 407B |
| UN3340 | Refrigerant gas R 407C |
| UN3341 | Thiourea dioxide |

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| UN3342 | Xanthates |
| UN3343 | Nitroglycerin mixture, desensitized, liquid, flammable, n.o.s. <i>with not more than 30 percent nitroglycerin, by mass</i> |
| UN3344 | Pentaerythrite tetranitrate mixture, desensitized, solid, n.o.s. <i>with more than 10 percent but not more than 20 percent PETN, by mass</i> |
| UN3345 | Phenoxyacetic acid derivative pesticide, solid, toxic |
| UN3346 | Phenoxyacetic acid derivative pesticide, liquid, flammable, toxic <i>flashpoint less than 23° C</i> |
| UN3347 | Phenoxyacetic acid derivative pesticide, liquid, toxic, flammable, <i>flashpoint not less than 23° C</i> |
| UN3348 | Phenoxyacetic acid derivative pesticide, liquid, toxic |
| UN3349 | Pyrethroid pesticide, solid, toxic |
| UN3350 | Pyrethroid pesticide, liquid, flammable, toxic, <i>flashpoint less than 23° C</i> |
| UN3351 | Pyrethroid pesticide, liquid, flammable, toxic, <i>flashpoint less than 23° C</i> |
| UN3352 | Pyrethroid pesticide, liquid, toxic |
| UN3354 | Insecticide gases, flammable, n.o.s. |
| UN3355 | Insecticide gases, toxic, flammable, n.o.s., <i>Inhalation hazard A, B, C or D</i> |
| UN3356 | Oxygen generator, chemical |
| UN3360 | Fiber, vegetable, dry |
| UN3361 | Chlorosilanes, toxic, corrosive, n.o.s. |
| UN3362 | Chlorosilanes, toxic, corrosive, flammable, n.o.s. |
| UN3363 | Dangerous Goods in Machinery or Dangerous Goods in Apparatus |
| UN3364 | Trinitrophenol (picric acid), <i>wetted with not less than 10 percent water by mass</i> |
| UN3365 | Trinitrochlorobenzene (picryl chloride), <i>wetted, with not less than 10 percent water by mass</i> |
| UN3366 | Trinitrotoluene (TNT) <i>wetted, with not less than 10 percent water by mass</i> |
| UN3367 | Trinitrobenzene, <i>wetted, with not less than 10 percent water, by mass</i> |
| UN3368 | Trinitrobenzoic acid, <i>wetted with not less than 10 percent water, by mass</i> |
| UN3370 | Urea nitrate, <i>wetted with not less than 10 percent water, by mass</i> |
| UN3373 | Biological substance, Category B |
| UN3379 | Desensitized explosives, liquid, n.o.s. |
| UN3380 | Desensitized explosives, solid, n.o.s. |
| UN3381 | Toxic by inhalation liquid, n.o.s. <i>with an LC50 lower than or equal to 200 ml/m³ and saturated vapor concentration greater than or equal to 500 LC50</i> |
| UN3382 | Toxic by inhalation liquid, n.o.s. <i>with an LC50 lower than or equal to 1000 ml/m³ and saturated vapor concentration greater than or equal to 10 LC50</i> |
| UN3383 | Toxic by inhalation liquid, flammable, n.o.s. <i>with an LC50 lower than or equal to 200 ml/m³ and saturated vapor concentration greater than or equal to 500 LC50</i> |
| UN3384 | Toxic by inhalation liquid, flammable, n.o.s. <i>with an LC50 lower than or equal to 1000 ml/m³ and saturated vapor concentration greater than or equal to 10 LC50</i> |
| UN3385 | Toxic by inhalation liquid, water-reactive, n.o.s. <i>with an LC50 lower than or equal to 200 ml/m³ and saturated vapor concentration greater than or equal to 500 LC50</i> |
| UN3386 | Toxic by inhalation liquid, water-reactive, n.o.s. <i>with an LC50 lower than or equal to 1000 ml/m³ and saturated vapor concentration greater than or equal to 10 LC50</i> |
| UN3387 | Toxic by inhalation liquid, oxidizing, n.o.s. <i>with an LC50 lower than or equal to 200 ml/m³ and saturated vapor concentration greater than or equal to 500 LC50</i> |
| UN3388 | Toxic by inhalation liquid, oxidizing, n.o.s. <i>with an LC50 lower than or equal to 1000 ml/m³ and saturated vapor concentration greater than or equal to 10 LC50</i> |
| UN3389 | Toxic by inhalation liquid, corrosive, n.o.s. <i>with an LC50 lower than or equal to 200 ml/m³ and saturated vapor concentration greater than or equal to 500 LC50</i> |

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| UN3390 | Toxic by inhalation liquid, corrosive, n.o.s. <i>with an LC50 lower than or equal to 1000 ml/m³ and saturated vapor concentration greater than or equal to 10 LC50</i> |
| UN3401 | Alkali metal amalgam, solid |
| UN3402 | Alkaline earth metal amalgams, solid |
| UN3405 | Barium chlorate, solution |
| UN3406 | Barium perchlorate, solution |
| UN3407 | Chlorate and magnesium chloride mixture, solution |
| UN3409 | Chloronitrobenzene, liquid |
| UN3410 | 4-Chloro-o-toluidine hydrochloride, solution |
| UN3416 | Chloroacetophenone (CN), liquid |
| UN3417 | Xylyl bromide, solid |
| UN3420 | Boron trifluoride propionic acid complex, solid |
| UN3424 | Ammonium dintro-o-cresolate, solution |
| UN3425 | Bromoacetic acid, solid |
| UN3426 | Acrylamide, solution |
| UN3427 | Chlorobenzyl chlorides, solid |
| UN3428 | 3-Chloro-4-methylphenyl isocyanate, solid |
| UN3429 | Chlorotoluidines, liquid |
| UN3430 | Xylenols, liquid |
| UN3437 | Chlorocresols, solid |
| UN3441 | Chlorodinitrobenzenes, solid |
| UN3442 | Dichloroanilines, solid |
| UN3443 | Dinitrobenzenes, solid |
| UN3448 | Tear gas substances, solid, n.o.s |
| UN3449 | Bromobenzyl cyanides, solid |
| UN3451 | Toluidines solid |
| UN3452 | Xylidines, solid |
| UN3454 | Dinitrotoluenes, solid |
| UN3455 | Cresols, solid |
| UN3457 | Chloronitrotoluenes, solid |
| UN3460 | N-Ethylbenzyltoluidines, solid |
| UN3462 | Toxins, extracted from living sources, solid, n.o.s. |
| UN3472 | Crotonic acid, liquid |
| UN3475 | Ethanol and gasoline mixture <i>or</i> Ethanol and motor spirit mixture <i>or</i> Ethanol and petrol mixture, <i>with more than 10 percent ethanol</i> |
| UN3480 | Lithium-ion batteries (including lithium polymer batteries) |
| UN3481 | Lithium-ion batteries (including lithium polymer batteries) contained in, or packed with, equipment |
| UN3485 | Calcium hypochlorite, dry, corrosive <i>or</i> Calcium hypochlorite mixtures, dry, corrosive with more than 39 percent available chlorine (8.8 percent available oxygen) |
| UN3486 | Calcium hypochlorite mixture, dry, corrosive with more than 10 percent but not more than 39 percent available chlorine |
| UN3487 | Calcium hypochlorite, hydrated, corrosive <i>or</i> Calcium hypochlorite, hydrated mixture, corrosive with not less than 5.5 percent but not more than 16 percent water |
| UN3488 | Toxic by inhalation liquid, flammable, corrosive, n.o.s. <i>with an LC50 lower than or equal to 200 ml/m³ and saturated vapor concentration greater than or equal to 500 LC50</i> |
| UN3489 | Toxic by inhalation liquid, flammable, corrosive, n.o.s. <i>with an LC50 lower than or equal to 1000 ml/m³ and saturated vapor concentration greater than or equal to 10 LC50</i> |

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| UN3490 | Toxic by inhalation liquid, water-reactive, flammable, n.o.s. <i>with an LC50 lower than or equal to 200 ml/m³ and saturated vapor concentration greater than or equal to 500 LC50-</i> |
| UN3491 | Toxic by inhalation liquid, water-reactive, flammable, n.o.s. <i>with an LC50 lower than or equal to 1000 ml/m³ and saturated vapor concentration greater than or equal to 10 LC50-</i> |
| UN3496 | Batteries, nickel-metal hydride see Batteries, dry. Sealed, n.o.s. <i>for nickel metal hydride batteries transported by modes other than vessel</i> |
| UN3500 | Chemical under pressure, n.o.s. |
| UN3501 | Chemical under pressure, flammable, n.o.s. |
| UN3502 | Chemical under pressure, toxic, n.o.s. |
| UN3503 | Chemical under pressure, corrosive, n.o.s. |
| UN3504 | Chemical under pressure, flammable, toxic, n.o.s. |
| UN3505 | Chemical under pressure, flammable, corrosive, n.o.s. |
| UN3506 | Mercury contained in manufactured articles |
| ID8000 | Consumer Commodity |
| NA9035 | Gas identification set |
| NA9191 | Chlorine dioxide, hydrate, frozen |
| NA9202 | Carbon monoxide, refrigerated liquid (<i>cryogenic liquid</i>) |
| NA9206 | Methyl phosphonic dichloride |
| NA9260 | Aluminum, molten |
| NA9263 | Chloropivaloyl chloride |
| NA9264 | 3,5-Dichloro-2,4,6-trifluoropyridine |
| NA9269 | Trimethoxysilane |

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Appendix C

USPS Packaging Instructions for Mailable Hazardous Materials

These Postal Service packaging instructions are for mailable types of hazardous materials. The numeric digits 1 through 9 correspond to the appropriate hazard class. The alpha characters differentiate the separate groups of materials within a hazard class. Packaging instructions 10A through 10C provide packaging information relating to special provisions not associated with a specific hazard class. Postal Service packaging instructions are provided as follows:

Hazard Class 1: Explosives

- 1A [Toy Propellant Devices](#)
- 1B [Safety Fuse](#)

Hazard Class 2: Gases

- 2A [Flammable Gases](#)
- 2B [Nonflammable Gases](#)
- 2C [Fire Extinguishers](#)
- 2D [Foodstuffs and Soap Products](#)
- 2E [Audible Fire Alarm Systems](#)
- 2F [Biological Products or Medical Preparations](#)

Hazard Class 3: Flammable and Combustible Liquids

- 3A [Flammable Liquids](#)
- 3B [Combustible Liquids](#)
- 3C [Flammable Liquid or Gas Lighters](#)
- 3D [Ethanol-based Flammable Liquids and Solids](#)

Hazard Class 4: Flammable Solids

- 4A [Flammable Solids](#)
- 4B [Safety Matches](#)

Hazard Class 5: Oxidizing Substances, Organic Peroxides

- 5A [Oxidizing Substances, Organic Peroxides](#)

Hazard Class 6: Toxic Substances and Infectious Substances

- 6A [Toxic Substances](#)
- 6B [Toxic Substances with LD₅₀ Oral Toxicity of 50 mg/kg or Less](#)
- 6C [Category B Infectious Substances](#)
- 6D [Sharps Waste and Other Regulated Medical Waste](#)

- 6E [Used Health Care Products](#)
- 6F [Forensic Material](#)
- 6G [Nonregulated Infectious Materials](#)
- 6H [Exempt Human or Animal Specimens](#)

Hazard Class 7: Radioactive Materials

- 7A [Radioactive Materials](#)

Hazard Class 8: Corrosives

- 8A [Corrosives](#)
- 8B [Nonspillable Wet Battery](#)
- 8C [Manufactured Devices that Contain Small Amounts of Mercury](#)

Hazard Class 9: Miscellaneous Hazardous Materials

- 9A [Dry Ice \(Carbon Dioxide Solid\)](#)
- 9B [Magnetized Materials](#)
- 9C [Miscellaneous Hazardous Materials](#)
- 9D [Lithium Metal and Lithium-ion Cells and Batteries — Domestic](#)
- 9E [Lithium Metal and Lithium-ion Cells and Batteries — International and APO/FPO/DPO](#)

Category 10: Other Packaging Instructions

- 10A [Small Quantity Provision](#)
- 10B [Excepted Quantity Provision](#)
- 10C [Cremated Remains](#)
- 10D [Adult Bird Boxes](#)

USPS Packaging Instruction 1A

Toy Propellant Devices

The proper shipping name for a mailable toy propellant device is “model rocket motor” or “igniter.” A device that is assigned identification number NA0323 or UN0454 and classed as a Division 1.4S explosive is eligible for mailing in domestic mail via surface transportation only, provided that all requirements are met and the device is properly packaged as follows.

Proper Shipping Name and ID Number

- Model Rocket Motors, NA0323.
- Igniters, UN0454.

Required Authorization

Prior written permission must be obtained from:

MANAGER, PRODUCT CLASSIFICATION
USPS HEADQUARTERS
475 L'ENFANT PLAZA SW, ROOM 4446
WASHINGTON, DC 20260

Mailability

- International Mail: Prohibited.
- Domestic Mail: Permitted only via surface transportation with prior approval. Each device must meet the specifications in [341.22a](#).

Design Specifications

Mailable devices must meet each of the following conditions:

- Each device must be ignitable by electrical means only.
- Each device must contain no more than 30g (1.07 ounces) of propellant.
- Each device must produce less than 80 newton seconds of total impulse with thrust duration not less than 0.050 second.
- Each device must be constructed so that all chemical ingredients are preloaded into a cylindrical paper or similarly constructed nonmetallic tube that does not fragment into sharp, hard pieces.
- Each device must be designed so that it will not burst under normal conditions.
- Each device must be incapable of spontaneous ignition under 500° F.
- Each device must not contain any type of explosive or pyrotechnic warhead other than a small, activation-charge, parachute-recovery system.

Required Packaging**Primary Receptacle**

- Each device must be packed in a securely sealed primary receptacle.
- Multiple primary receptacles are permitted within a single mailpiece.
- Each primary receptacle must be surrounded by sufficient cushioning material to absorb shock and prevent breakage.

Outer Shipping Container

- A strong outer packaging that is capable of firmly and securely holding the primary receptacle(s) and cushioning material is required.
- Each mailpiece must not exceed a total weight of 25 pounds.

Marking

- Each outer packaging must be clearly marked on the address side with “Toy Propellant Devices,” followed by the applicable proper shipping name and UN or NA number. The markings “Surface Only” or “Surface Mail Only” and “Handle With Care” must also appear on the address side of the mailpiece. A DOT hazardous materials warning label must not be affixed.
- A complete mailing address and return address must be used.

Documentation

- A properly completed shipper's declaration for dangerous goods must be prepared in triplicate and affixed to the outside of the mailpiece.

Note: Full responsibility rests with the mailer to comply with Bureau of Alcohol, Tobacco, Firearms, and Explosives (BATFE) regulations before mailing. A legible photocopy of the Product Classification Manager's approval letter must be presented by the mailer to the Postal Service acceptance clerk at the time of mailing.

USPS Packaging Instruction 1B

Safety Fuse

Safety fuses consist of a core of black powder overspun with yarns, waterproofing compounds, and/or tapes. A safety fuse assigned identification number UN0105 and classed as a Division 1.4S explosive may be mailed only as permitted in [341.22b](#) and when properly packaged as follows.

Proper Shipping Name

- Safety Fuse.

ID Number

- UN0105.

Required Authorization

Prior written permission must be obtained from:

MANAGER, PRODUCT CLASSIFICATION
USPS HEADQUARTERS
475 L'ENFANT PLAZA SW, ROOM 4446
WASHINGTON, DC 20260

Mailability

- International Mail: Prohibited.
- Domestic Mail: Permitted only via surface transportation with prior approval.

Required Packaging**Primary Receptacle**

- Each device must be packed in a securely sealed primary receptacle.
- Multiple primary receptacles are permitted within a single mailpiece.

Cushioning Material

- Each primary receptacle must be surrounded by sufficient cushioning material to absorb shock and prevent breakage.

Outer Packaging

- A strong outer packaging that is capable of firmly and securely holding the primary receptacle(s) and cushioning material is required.
- The outer packaging must be made of fiberboard, wood, or metal. Friction closures or paperboard containers are not acceptable.

Marking

- The outside of the mailpiece must be clearly marked on the address side with “Safety Fuse, UN0105” and “Surface Only” or “Surface Mail Only.”
- A complete mailing address and return address must be used.

Documentation

- A properly completed shipper's declaration for dangerous goods must be prepared in triplicate, and affixed to the outside of the mailpiece.

Note: Full responsibility rests with the mailer to comply with Bureau of Alcohol, Tobacco, Firearms, and Explosives (BATFE) regulations before mailing. A legible photocopy of the Product Classification Manager's approval letter must be presented by the mailer to the Postal Service acceptance clerk at the time of mailing.

USPS Packaging Instruction 2A

Flammable Gases

A Class 2, Division 2.1 flammable gas that qualifies as a Limited Quantity surface material is mailable provided that all applicable requirements in [342](#) are met and it is properly packaged as follows.

Proper Shipping Name

- Consumer Commodity.

ID Number

- Various (see Appendix [A](#)).

Mailability

- International Mail: Prohibited.
- Domestic Mail: Permitted only via surface transportation.

Required Packaging**Primary Receptacle**

- The capacity of an other-than-metal (nonmetal) primary receptacle must be 4 fluid ounces (7.22 cubic inches) or less per mailpiece.
- The capacity of a metal primary receptacle must be 33.8 fluid ounces (1-liter or 61.0 cubic inches) or less per mailpiece.
- The liquid content of the material and the gas must not completely fill the primary receptacle at 130° F.

- A DOT 2P container must be used if the internal pressure is from 140 psig to 160 psig at 130° F (55° C). A DOT 2Q container must be used if the pressure is from 161 psig to 180 psig at 130° F (55° C).
- A container with an internal pressure more than 180 psig at 130° F (55° C) is prohibited from mailing.
- Primary receptacles must have recessed valves, screw-thread caps, tap closures, or other means to prevent accidental discharge. Valves and fittings must be protected to ensure the integrity of the receptacle during transport.

Cushioning Material

- Sufficient cushioning material must surround the primary receptacle to absorb shock and prevent damage.

Outer Packaging

- Strong outer packaging that is capable of firmly and securely holding the primary receptacle and cushioning material is required.
- Multiple primary receptacles may be securely packed within a single strong outer packaging, provided the total volume of flammable gas does not exceed 33.8 fluid ounces (1 liter) per mailpiece.

Marking

Labels and markings must be placed on the address side of the mailpiece unless specified differently in [221.1](#) and [325.1](#).

- The outer packaging must bear an approved DOT Limited Quantity surface mark designating surface transportation, prepared under [342.4b](#).
- A complete return and delivery address must be used.

USPS Packaging Instruction 2B

Nonflammable Gases

A Class 2, Division 2.2 nonflammable gas that qualifies as a Limited Quantity air or Limited Quantity surface material is mailable provided that all applicable requirements in [342](#) are met and it is properly packaged as follows.

Proper Shipping Name

- Consumer Commodity.

ID Number

- Various (see Appendix [A](#)).

Mailability

- International Mail: Prohibited.
- Domestic Mail: Permitted with restrictions via air transportation and permitted via surface transportation.

Required Packaging

Primary Receptacle(s)

- The capacity of an other-than-metal (nonmetal) primary receptacle must be 4 fluid ounces (7.22 cubic inches) or less per mailpiece.
- The capacity of a metal primary receptacle must be 33.8 fluid ounces (1-liter or 61.0 cubic inches) or less.
- The liquid content of the material and the gas must not completely fill the primary receptacle at 130° F.
- A DOT 2P container must be used if the internal pressure is from 140 psig to 160 psig at 130° F (55° C). A DOT 2Q container must be used if the pressure is from 161 psig to 180 psig at 130° F (55° C).
- A container with an internal pressure more than 180 psig at 130° F (55° C) is prohibited from mailing.
- The primary receptacle(s) must be packaged to protect valves and fittings and to ensure integrity during transport.
- The primary receptacle(s) must have a recessed valve, screw-thread cap, tap closure, or other means to prevent accidental discharge.

Cushioning Material

- Sufficient cushioning material must surround the primary receptacle to absorb shock and prevent damage.

Outer Packaging

- Strong outer packaging that is capable of firmly and securely holding the primary receptacle(s) and cushioning material is required.
- Multiple primary receptacles may be securely packed within a single strong outer packaging.
- Each mailpiece must not exceed a total weight of 25 pounds.

Marking

The following labels and text markings must be placed on the address side of the mailpiece unless specified in [221.1](#) and [325.1](#).

- For air transportation, mailpieces must bear the DOT Limited Quantity air mark (with the symbol “Y” in the center), an approved DOT Class 9 hazardous material warning label, Identification Number “ID8000,” and the proper shipping name “Consumer Commodity.”
- For surface transportation, the outer packaging must bear an approved DOT Limited Quantity ground mark designating surface transportation, prepared under [342.4c](#).
- A complete return and delivery address must be used.

Documentation

- For air transportation, a mailable, nonflammable gas must have a properly completed shipper's declaration for dangerous goods prepared in triplicate and affixed to the outside of the mailpiece.

USPS Packaging Instruction 2C

Fire Extinguishers

A fire extinguisher containing a Division 2.2 compressed, nonflammable gas assigned UN1044 that can qualify as a Limited Quantity surface material is mailable if it does not contain a methyl bromide gas mixture or sulfuric acid, and, if the gas is nonflammable, nonpoisonous, or noncorrosive, as specified in 49 CFR § 173.309(a). All applicable requirements in [342](#) must be met, and it must be properly packaged as follows.

Proper Shipping Name

- Consumer Commodity.

ID Number

- UN1044 (see “Note” under Documentation below).

Mailability

- International Mail: Prohibited.
- Domestic Mail: Permitted with restrictions via air transportation and permitted via surface transportation.

Required Packaging

Primary Receptacle

- The primary receptacle must be a DOT specification 2P or 2Q container that meets the requirements in 49 CFR 173.309(a)(4).
- Only one primary receptacle not exceeding 1 liter (33.8 ounces) is permitted per mailpiece.

Cushioning Material

- Sufficient cushioning material must surround the primary receptacle to absorb shock and prevent damage.

Outer Packaging

- Strong outer packaging that is capable of firmly and securely holding the primary receptacle and cushioning material is required.

Marking

The following labels and text markings must be placed on the address side of the mailpiece unless specified in [325.1](#).

- For air transportation, mailpieces must bear the DOT Limited Quantity air mark (with the symbol “Y” in the center), an approved DOT Class 9 hazardous material warning label (if applicable), Identification Number “ID8000,” and the proper shipping name “Consumer Commodity.”
- For surface transportation, the outer packaging must bear an approved DOT Limited Quantity surface mark designating surface transportation, prepared under [342.4c](#).
- A complete return and delivery address must be used.

Documentation

- For air transportation, a properly completed shipper's declaration for dangerous goods must be prepared in triplicate and affixed to the outside of the mailpiece.

Note: Fire extinguishers assigned UN0275, UN0276, UN0323, and UN0381 are prohibited from mailing. However, fire extinguishers assigned UN1774 are mailable as Class 8 corrosives subject to the limitations for corrosives in [348](#).

USPS Packaging Instruction 2D

Foodstuffs and Soap Products

Foodstuffs and soap products that are held in containers under pressure are mailable in the domestic mail via surface transportation if they qualify as a Limited Quantity surface material and all applicable requirements in [342](#) are met.

Proper Shipping Name

- Consumer Commodity.

ID Number

- Various (see Appendix [A](#)).

Mailability

- International Mail: Prohibited.
- Domestic Mail: Permitted only via surface transportation.

Required Packaging**Primary Receptacle**

- Acceptable only in a nonrefillable metal primary receptacle not exceeding 61.0 cubic inches (1 liter) with soluble or emulsified compressed gas.
- Liquid content of the material and the gas must not completely fill the primary receptacle at 130° F, the pressure in the primary receptacle must be 140 psig or less at 130° F, and the metal primary receptacle must be able to withstand one-and-one-half times the equilibrium pressure of the content at 130° F.

Cushioning Material

- The primary receptacle must be surrounded by sufficient cushioning material to absorb shock and prevent damage.

Outer Packaging

- Strong outer packaging that is capable of firmly and securely holding the primary receptacle and cushioning material is required.

- Multiple primary receptacles may be securely packed within a single outer packaging up to a weight limit of 25 pounds (11.325 kg) per mailpiece.

Marking

The following labels and text markings must be placed on the address side of the mailpiece unless specified in [221.1](#) and [325.1](#).

- The address side of each outer packaging must be clearly marked with “Inside Containers Comply With Prescribed Regulations” per 49 CFR §173.306(b)(1).
- The outer packaging must bear an approved DOT Limited Quantity surface mark designating surface transportation, prepared under [342.4c](#).
- A complete return and delivery address must be used.

USPS Packaging Instruction 2E

Audible Fire Alarm Systems

An audible fire alarm system powered by a compressed gas is mailable only in domestic mail via surface transportation provided that the system qualifies as a Limited Quantity surface material and all applicable requirements in [342](#) are met.

Proper Shipping Name

- Consumer Commodity.

ID Number

- Various (see Appendix [A](#)).

Mailability

- International Mail: Prohibited.
- Domestic Mail: Permitted only via surface transportation.

Required Packaging

Primary Receptacle

- The content of the primary receptacle is a nonflammable, nonpoisonous, or noncorrosive gas.
- The gas is contained within a metal primary receptacle that has a capacity of 19.3 fluid ounces (35 cubic inches) or less, does not exceed a pressure of 70 psig at 70° F, and is not completely filled at 130° F.
- Each nonrefillable primary receptacle must be designed to withstand a burst pressure of not less than 4 times its charged pressure at 130° F.
- Each refillable primary receptacle must be designed to withstand a burst pressure of not less than 5 times its charged pressure at 130° F.

Cushioning Material

- The primary receptacle must be surrounded by sufficient cushioning material to absorb shock and prevent breakage.

Outer Packaging

- Strong outer packaging that is capable of firmly and securely holding the primary receptacle and cushioning is required.
- Multiple primary receptacles may be securely packed within a single outer packaging up to a weight limit of 25 pounds (11.325 kg) per mailpiece.

Marking

Labels and markings must be placed on the address side of the mailpiece unless specified differently in [221.1](#) and [325.1](#).

- The outer packaging must bear an approved DOT Limited Quantity surface mark designating surface transportation, prepared under [342.4c](#).
- A complete return and delivery address must be used.

USPS Packaging Instruction 2F

Biological Products or Medical Preparations

A product or preparation in a nonrefillable metal primary receptacle charged with a nonflammable solution containing biological products or a medical preparation that could deteriorate by heat may be accepted in the domestic mail via surface transportation only provided that the item qualifies as a Limited Quantity surface material, and all applicable requirements in [342](#) are met.

Proper Shipping Name

- Consumer Commodity.

ID Number

- Various (see Appendix [A](#)).

Mailability

- International Mail: Prohibited.
- Domestic Mail: Permitted only via surface transportation.

Packaging Requirements**Primary Receptacle**

- Capacity of the primary receptacle must be 19.3 fluid ounces (35 cubic inches) or less, pressure in the primary receptacle must be 140 psig or less at 130° F, and the liquid content of product and gas must not completely fill the container at 130° F.

- If heated until the pressure in the primary receptacle is equivalent to equilibrium pressure of content at 130° F, the primary receptacle must be able to withstand leakage, distortion, or other damage or defects.
- Only one primary receptacle is permitted per mailpiece.

Cushioning Material

- The primary receptacle must be surrounded by sufficient cushioning material to absorb shock and prevent breakage.

Outer Packaging

- Strong outer packaging that is capable of firmly and securely holding the primary receptacle and cushioning is required.
- Multiple primary receptacles are not permitted.

Marking

Labels and markings must be placed on the address side of the mailpiece unless specified differently in [221.1](#) and [325.1](#).

- The outer packaging must bear an approved DOT Limited Quantity surface mark designating surface transportation, prepared under [342.4c](#).
- A complete return and delivery address must be used.

USPS Packaging Instruction 3A

Flammable Liquids

A flammable liquid having a flashpoint greater than 20° F (–7° C) but less than 100° F (38° C) is mailable in domestic mail via surface transportation, if the liquid qualifies as a Limited Quantity surface material, and all applicable requirements in [343](#) are met. Flammable liquids having a flashpoint of 20° or less are not mailable.

Proper Shipping Name

- Consumer Commodity.

ID Number

- Various (see Appendix [A](#)).

Mailability

- International Mail and APO/FPO/DPO: Prohibited.
- Domestic Mail: Permitted only via surface transportation.

Required Packaging

Separate packaging requirements apply depending on the flashpoint of the flammable liquid.

For flashpoint greater than 20° F (-7° C) but not more than 73° F (23° C):

Primary Receptacle

- A metal primary receptacle must not exceed 1 quart.
- A nonmetal primary receptacle must not exceed 1 pint.
- The primary receptacle must have a screw cap (with minimum of one-and-one-half turns), soldering clips, or other means of secure closure (friction tops are not acceptable).
- Multiple primary receptacles are permitted, provided the aggregate quantity of flammable material per mailpiece does not exceed 1 quart for metal primary containers or 1 pint for nonmetal primary containers.

Cushioning Material and Secondary Packaging

- Enough cushioning material must surround the primary receptacles to prevent breakage and absorb any potential leakage.
- The cushioning and primary receptacles must be packed in securely sealed secondary packaging.

Outer Packaging

- Strong outer packaging that is capable of firmly and securely holding the primary receptacles, cushioning material, and secondary packaging is required.

Marking

Labels and markings must be placed on the address side of the mailpiece unless specified differently in [221.1](#) and [325.1](#).

- The outer packaging must bear an approved DOT Limited Quantity surface mark designating surface transportation, prepared under [343.3b](#).
- A complete return and delivery address must be used.

For flashpoint greater than 73° F (23° C) but less than 100° F (38° C):

Primary Receptacle

- A metal primary receptacle must not exceed 1 gallon.
- A nonmetal primary receptacle must not exceed 1 quart.
- The primary receptacle must have a screw cap (with minimum of one-and-one-half turns), soldering clips, or other means of secure closure (friction tops are not acceptable).
- Multiple primary receptacles are permitted, provided the aggregate quantity of flammable material per mailpiece does not exceed 1 gallon for metal primary containers or 1 quart for nonmetal primary containers.

Cushioning Material and Secondary Packaging

- Enough cushioning material must surround the primary receptacles to prevent breakage and absorb any potential leakage.
- The cushioning and primary receptacles must be packed in securely sealed secondary packaging.

Outer Packaging

- Strong outer packaging that is capable of firmly and securely holding the primary receptacles, cushioning material, and secondary packaging is required.

Marking

Labels and markings must be placed on the address side of the mailpiece unless specified differently in [221.1](#) and [325.1](#).

- The outer packaging must bear an approved DOT Limited Quantity surface mark designating surface transportation, prepared under [343.3b](#).
- A complete return and delivery address must be used.

For flashpoint of at least 100° F (38° C) but not more than 140° F (60° C):

- Use Packaging Instruction 3B.

USPS Packaging Instruction 3B

Combustible Liquids

A combustible liquid having a flashpoint of 140° F (60° C) but no more than 200° F (93° C) is mailable if it qualifies as a Limited Quantity material in the Postal Service for air or surface transportation and meets all applicable requirements in [343](#). A flammable liquid having a flashpoint of at least 100° F (38° C) but not more than 140° F (60° C) may be reclassified as a combustible liquid within the limits of 49 CFR 173.120(b).

Proper Shipping Name

- Consumer Commodity.

ID Number

- Various (see Appendix [A](#)).

Mailability

- International Mail: Prohibited.
- Domestic Mail: For flashpoints of at least 100° F (38° C), but not more than 140° F (60° C), permitted only via surface transportation. For flashpoints above 140° (60° C), permitted with restrictions via air transportation and surface transportation.

Required Packaging

Separate packaging requirements apply, depending on the flashpoint of the combustible liquid.

For flashpoint of at least 100° F (38° C) but not more than 140° F (60° C):

General

- Permitted only in domestic mail via surface transportation.

Primary Receptacle

- The capacity of a metal primary receptacle must not exceed 1 gallon.
- A nonmetal primary receptacle must not exceed 1 quart.
- Multiple primary receptacles are permitted, provided the aggregate quantity of flammable material per mailpiece does not exceed 1 gallon for metal primary containers or 1 quart for nonmetal primary containers.

Absorbent and Cushioning Material

- Enough absorbent and cushioning material must surround the primary receptacles to prevent breakage and absorb any potential leakage.

Secondary Packaging

- The cushioning and primary receptacles must be packed in a securely sealed secondary packaging.

Outer Packaging

- Strong outer packaging that is capable of firmly and securely holding the primary receptacles, cushioning material, and secondary packaging is required.

Marking

Labels and markings must be placed on the address side of the mailpiece unless specified differently in [221.1](#) and [325.1](#).

- The outer packaging must bear an approved DOT Limited Quantity surface mark designating surface transportation, prepared under [343.3b](#).
- A complete return and delivery address must be used.

For flashpoint above 140° F (60° C) but not more than 200° F (93° C):

General

- Permitted in domestic mail via air or surface transportation.

Primary Receptacle

- The capacity of the primary receptacle must not exceed 1 gallon.
- Multiple primary receptacles are permitted, provided the aggregate quantity of flammable material per mailpiece does not exceed 1 gallon.

Absorbent and Cushioning Material

- Enough absorbent and cushioning material must surround the primary receptacles to prevent breakage and absorb any potential leakage.

Secondary Packaging

- The cushioning and primary receptacles must be packed in a securely sealed secondary packaging.

Outer Packaging

- Strong outer packaging that is capable of firmly and securely holding the primary receptacles, cushioning material, and secondary packaging is required.

Marking

The following labels and text markings must be placed on the address side of the mailpiece unless specified in [221.1](#) and [325.1](#).

- For air transportation, mailpieces must bear the DOT Limited Quantity air mark (with the symbol “Y” in the center), an approved DOT Class 9 hazardous material warning label, Identification Number “ID8000,” and the proper shipping name “Consumer Commodity.”
- For surface transportation, the outer packaging must bear an approved DOT Limited Quantity surface mark designating surface transportation, prepared under [343.3b](#).
- A complete return and delivery address must be used.

Documentation

- For air transportation, a properly completed shipper's declaration for dangerous goods must be prepared in triplicate and affixed to the outside of the mailpiece.

For flashpoint above 200° F (93° C):**General**

- The material is not regulated as a hazardous material. Therefore, it is permitted in domestic mail via air or surface transportation without restriction when properly packaged to prevent leakage during transport.

Primary Receptacle

- Each primary receptacle must be sturdy and have a secure method of closure.
- Multiple primary receptacles may be enclosed within a single mailpiece.

Absorbent and Cushioning Material

- Enough absorbent and cushioning material must surround the primary receptacle to prevent breakage and absorb all potential leakage.

Outer Packaging

- Strong outer packaging that is capable of firmly and securely holding the primary receptacle and cushioning material is required.

Marking

- A complete return address and delivery address must be used.

USPS Packaging Instruction 3C

Flammable Liquid or Gas Lighters

A lighter equipped with an ignition element and containing fuel is classified as a Class 3 flammable liquid. A lighter containing a flammable gas is classed as a Division 2.1 flammable gas. A lighter that contains either flammable liquid or flammable gas is permitted in domestic mail via surface transportation only with prior written approval, provided all the applicable requirements of [343.25](#) are met.

Proper Shipping Name and ID Number

- Lighters or Lighter Refills, UN1057.

Required Authorization

- The design of the lighter must be certified by the lighter testing agency authorized by the DOT Associate Administrator for Hazardous Material Safety, per 49 CFR 173.21(i) and 173.308, and an Approval Number (LAA****) must have been issued.

Mailability

- International Mail: Prohibited.
- Domestic Mail: Permitted only via surface transportation.

Required Packaging

Primary Receptacle

- The design of the lighter must be approved by DOT (see “Required Authorization” above).

Cushioning Material

- Sufficient cushioning material must be used to absorb shock and protect the lighter from breakage.

Outer Packaging

- The packaging must be designed to protect the lighter's sparking mechanism from accidental ignition caused by friction or external pressure during transport.
- The outer packaging must be of sufficient strength to prevent the inner contents from breaking or bursting through.

Marking

- The address side of each mailpiece must be clearly marked with “Surface Only” or “Surface Mail Only” and “Lighters” or “Lighter Refills” followed by the LAA**** Number.
- A complete return address and delivery address must be used.

Note: A legible photocopy of the PCSC manager's approval letter must accompany the mailing at the time of deposit.

USPS Packaging Instruction 3D

Ethanol-based Flammable Liquids and Solids

Certain limited quantities of flammable liquids and solids containing ethyl alcohol are permitted in the domestic mail via air transportation, with special authorization from the manager, Product Classification when all applicable requirements in [343.27](#) are met.

Proper Shipping Name

- Consumer Commodity.

ID Number

- Various (see Appendix A).

Mailability

- International Mail and APO/FPO/DPO: Prohibited.
- Domestic Mail: Permitted via air transportation with special authorization; or via surface transportation by following Packaging Instruction 3A.

Required Packaging

Separate packaging requirements apply, dependent on the percentage of ethyl alcohol and primary container used.

For content not more than 70% ethyl alcohol:

Primary Receptacle

- A nonglass primary receptacle must not exceed 16 ounces for liquids or 1 pound for solids.
- A glass primary receptacle must not exceed 8 ounces for liquids or 1/2 pound for solids.
- The primary receptacle must have a screw cap (with minimum of one and one-half turns), soldering clips, or other means of secure closure (friction tops are not acceptable).
- Multiple primary receptacles are permitted when the total aggregate mailpiece weight does not exceed 25 pounds.
- The total volume of flammable liquid in the mailpiece must not exceed 96 ounces.
- The total volume of flammable solids in the mailpiece must not exceed 16 pounds.

Cushioning Material

- Enough cushioning material must surround the primary receptacles to prevent breakage and absorb any potential leakage.
- The cushioning and primary receptacles must be packed in securely sealed outer packaging.

Outer Packaging

- Strong outer packaging that is capable of firmly and securely holding the primary receptacles and cushioning material is required.

Marking

- Each package must bear the text “Contains Air-Eligible Ethyl Alcohol — Authorization No. #” on the outer packaging in at least 14-point type.
- A complete company name, return address, and delivery address must be applied to each outer package.

For content more than 70% ethyl alcohol:**Primary Receptacle**

- The primary receptacle must not exceed 8 ounces for liquids or 1/2 pound for solids.
- The primary receptacle must have a screw cap (with minimum of one and one-half turns), soldering clips, or other means of secure closure (friction tops are not acceptable).
- Multiple primary receptacles are permitted when the total aggregate mailpiece weight does not exceed 16 pounds.
- The total volume of flammable liquid in the mailpiece must not exceed 48 ounces.
- The total volume of flammable solids in the mailpiece must not exceed 8 pounds.

Cushioning Material

- Enough cushioning material must surround the primary receptacles to prevent breakage and absorb any potential leakage.
- The cushioning and primary receptacles must be packed in securely sealed outer packaging.

Outer Packaging

- Strong outer packaging that is capable of firmly and securely holding the primary receptacles and cushioning material is required.

Marking

- Each package must bear the text “Contains Air-Eligible Ethyl Alcohol — Authorization No. #” on the outer packaging in at least 14-point type.
- A complete company name, return address, and delivery address must be applied to each outer package.

USPS Packaging Instruction 4A

Flammable Solids

A flammable solid that qualifies as a Limited Quantity surface material is permitted in the domestic mail via surface transportation only, provided all applicable requirements in [344](#) are met.

Proper Shipping Name

- Various (see Appendix [A](#)).

ID Number

- Various (see Appendix [A](#)).

Mailability

- International Mail: Prohibited.
- Domestic Mail: Permitted only via surface transportation.

Required Packaging

Primary Receptacle

- The primary receptacle must have a secure seal and together with its contents must not exceed a weight of 1 pound.
- Multiple primary receptacles are permitted.

Cushioning Material

- Sufficient cushioning material must be used to absorb shock and the primary receptacle from breakage.

Outer Packaging

- Strong outer packaging that is capable of firmly and securely holding the primary receptacle and cushioning material is required.
- Each mailpiece must not exceed a total weight of 25 pounds.

Marking

Labels and markings must be placed on the address side of the mailpiece unless specified differently in [221.1](#) and [325.1](#).

- The outer packaging must bear an approved DOT Limited Quantity surface mark designating surface transportation, prepared under [344.3a](#).
- A complete return and delivery address must be used.

USPS Packaging Instruction 4B

Safety Matches

Safety matches (book, card, or strike-on-box) may be mailed only in domestic mail via surface transportation, provided all applicable requirements in [344](#) are met, including:

- They do not ignite spontaneously under conditions normally incident to transportation or when subjected for eight consecutive hours to a temperature of 200° F (93° C).
- They cannot be readily ignited by friction unless struck on their own or on a similar box, card, or book.

Note: Strike-anywhere matches assigned UN1331 and other types of matches assigned UN2254 or UN1945 are nonmailable.

Proper Shipping Name

- Matches, Safety.

ID Number

- UN1944.

Mailability

- International Mail: Prohibited.
- Domestic Mail: Permitted only via surface transportation.

Required Packaging

Primary Receptacle

- Mailable types of safety matches must be tightly packed in a securely sealed primary receptacle to prevent any shifting or movement that could cause accidental ignition by rubbing against adjoining items.
- Multiple primary receptacles are permitted per mailpiece.

Outer Packaging

- The outer packaging material must be made of fiberboard, wood, or other equivalent and be strong enough to prevent the inner contents from bursting through.
- The primary container(s) must be snugly packed within the outer packaging.
- Each mailpiece must not exceed a total weight of 25 pounds.

Marking

- The address side of each mailpiece must be clearly marked “Surface Only” or “Surface Mail Only” and either “Book Matches”, “Card matches,” or “Strike-on-Box Matches,” as applicable.
- A complete return address and delivery address must be used.

Documentation

- A shipping paper is not required.

USPS Packaging Instruction 5A

Oxidizing Substances, Organic Peroxides

An oxidizing substance or an organic peroxide that qualifies as a Limited Quantity material within the Postal Service is permitted in the domestic mail for air and surface transportation provided that all applicable requirements in [345](#) are met.

Proper Shipping Name

- Various (see Appendix [A](#)).

ID Number

- Various (see Appendix [A](#)).

Mailability

- International Mail: Prohibited.
- Domestic Mail: Permitted with restrictions via air transportation, or surface transportation.

Required Packaging

Primary Receptacle

- For liquids, the capacity of the primary receptacle must not exceed 1 pint (.0473 liters).
- For solids, the weight of the contents of the primary receptacle must not exceed 1 pound (.0453 kg).
- Multiple primary receptacles are permitted up to a total weight of 25 pounds per mailpiece.

Absorbent and Cushioning Material

- Enough absorbent and cushioning material must surround the primary receptacle to prevent breakage and absorb all potential leakage.

Secondary Packaging

- For liquids only, the cushioning and primary receptacle must be packed in a secondary leak-resistant packaging or material that is securely sealed.

Outer Packaging

- Strong outer packaging that is capable of firmly and securely holding the primary receptacle and cushioning material is required.
- Each mailpiece must not exceed a total weight of 25 pounds.

Marking

The following labels and text markings must be placed on the address side of the mailpiece unless specified in [221.1](#) and [325.1](#).

- For air transportation, mailpieces must bear the DOT Limited Quantity air mark (with the symbol “Y” in the center), an approved DOT Class 5.1 or 5.2 hazardous material warning label, Identification Number and the proper shipping name.
- For surface transportation, the outer packaging must bear an approved DOT Limited Quantity surface mark designating surface transportation, prepared under [343.3c](#).
- A complete return and delivery address must be used.

Documentation

- For air transportation, a mailable material must have a properly completed shipper’s declaration for dangerous goods that is prepared in triplicate affixed to the outside of the mailpiece.
- The shipper’s declaration must be properly completed and signed by the mailer.

USPS Packaging Instruction 6A

Toxic Substances

A Division 6.1 toxic substance that qualifies as a Limited Quantity material within the Postal Service is permitted in the domestic mail via air or surface transportation when all applicable requirements in [346](#) are met.

Proper Shipping Name

- Consumer Commodity.

ID Number

- Various (see Appendix [A](#)).

Mailability

- International Mail: Prohibited.
- Domestic Mail: Permitted via air transportation or surface transportation.

Required Packaging**Primary Receptacle**

- The primary container must be of sufficient strength and have a secure method of closure.
- The capacity of the primary receptacle(s) per mailpiece must not exceed 8 ounces.

Absorbent and Cushioning Material

- Enough absorbent and cushioning material must surround the primary receptacle to prevent breakage and absorb all potential leakage.

Outer Shipping Container

- Strong outer packaging that is capable of firmly and securely holding the primary receptacle and cushioning material is required.
- The inner receptacle and cushioning material must fit snugly within the outer packaging.

Marking

The following labels and text markings must be placed on the address side of the mailpiece unless specified in [221.1](#) and [325.1](#).

- For air transportation, mailpieces must bear the DOT Limited Quantity air mark (with the symbol “Y” in the center), an approved DOT Class 9 hazardous material warning label, Identification Number “ID8000,” and the proper shipping name “Consumer Commodity.”
- For surface transportation, the outer packaging must bear an approved DOT Limited Quantity surface mark designating surface transportation, prepared under [342.4c](#).
- A complete return and delivery address must be used.

Documentation

- For air transportation, a mailable material must have a properly completed shipper's declaration for dangerous goods that is prepared in triplicate and affixed to the outside of the mailpiece.

USPS Packaging Instruction 6B

Toxic Substances with LD₅₀ Oral Toxicity of 50 mg/kg or Less

A Division 6.1 toxic substance having an LD₅₀ for oral toxicity of greater than 5 mg/kg but less than or equal to 50 mg/kg is mailable only between authorized parties under the specific conditions in [346.231b](#).

Proper Shipping Name

- Various (see Appendix [A](#)).

ID Number

- Various (see Appendix [A](#)).

Mailability

- International Mail: Prohibited.
- Domestic Mail: Permitted only between authorized parties via air transportation or surface transportation.

Authorized Mailers

Toxic substances that have an LD₅₀ for oral toxicity of greater than 5 mg/kg but less than or equal to 50 mg/kg may be mailed between the following parties subject to these specific conditions:

- Toxic substances for scientific use (not outwardly or of their own force dangerous or injurious to life, health, or property) may be sent only between manufacturers, dealers, bona fide research or experimental scientific laboratories, and employees of federal, state, or local governments who have official use for such poisons and are designated by the agency head to receive or send such poisons.
- Poisonous drugs and medicines that are regulated as Division 6.1 materials may be sent only from the manufacturer or dealer of the drugs and medicines to licensed physicians, surgeons, dentists, pharmacists, druggists, cosmetologists, barbers, and veterinarians (18 U.S.C. 1716).

Note: Drugs and medicines that are not regulated as Division 6.1 materials are subject to the conditions in Chapter [4](#).

Required Packaging

Primary Receptacle

- The total volume in the primary receptacle must not exceed 8 ounces.
- The primary receptacle must be leak-resistant and have a secure method of closure.

Absorbent and Cushioning Material

- Each primary receptacle that contains a liquid material must be completely surrounded by absorbent material capable of completely taking up all the contents in the event of breakage.
- Sufficient cushioning material must surround the primary receptacle(s) to absorb shocks and prevent damage.

Secondary Container

- For toxic liquids the secondary container must be leakproof.
- For toxic solids the secondary container must be siftproof.
- The primary receptacle, absorbent material, and cushioning material must fit firmly and securely within the secondary packaging to absorb shocks and prevent breakage during normal postal handling.

Outer Shipping Container

- The outer container must be constructed of 200-pound grade corrugated fiberboard or equivalent strength.
- The secondary container must fit firmly and securely within the outer shipping container packaging to prevent breakage during normal postal handling.

Marking

- The proper shipping name and UN number of the toxic material must be clearly marked on the address of the mailpiece.
- Orientation markings (see [Exhibit 226](#)) that properly indicate the upright position of the primary receptacle(s) must be displayed on two opposite outer side walls of the outer shipping container.
- Each mailpiece must bear a complete return address and delivery address. The delivery address must be placed on the top side of the mailpiece.

Documentation

- For air or surface transportation, a properly completed shipper's declaration for dangerous goods (i.e., shipping paper) must be prepared in triplicate and affixed to the outside of the mailpiece.

USPS Packaging Instruction 6C

Category B Infectious Substances

Infectious substance means a material known or reasonably expected to contain a pathogen. A pathogen is a microorganism that can cause disease in humans or animals. Examples of pathogens include bacteria, viruses, fungi, and other infectious agents. An infectious substance must be assigned to one of the following two packaging categories:

- Category A: Category A infectious substances are not mailable.
- Category B: An infectious substance that does not meet the criteria for inclusion in Category A. A mailpiece known or suspected to contain a Category B infectious substance is mailable as described in [346](#).

Proper Shipping Name and ID Number

- Biological substance, Category B, UN3373.

Required Authorization

All vendors shipping COVID-19-related UN3373 Category B Infectious Substances kits to end-users must obtain an authorization from the Postal Service before mailing. It is the responsibility of the shipper to ensure that they are aware of, and comply with, all other applicable requirements and regulations for the mailing of these materials; and they must be able to provide evidence of compliance before a written request is submitted to the manager of Product Classification, Postal Service Headquarters (see part 214 for address).

Under these provisions, only tests developed and performed by laboratories certified under the Clinical Laboratory Improvement Amendments (CLIA) or equivalent clinical oversight regulations, and commercial tests and home collection kits authorized by either the FDA or an Institutional Review Board, will be considered.

Mailability

- International Mail: Mailable only when:
 - Permitted by the destination country (see the Individual Country Listing in the IMM).
 - They are presented by and to authorized laboratories designated in “International Mail” below in this Packaging Instruction.
 - They meet the definition in [346.12a](#).
 - Written approval has been granted by the manager, Product Classification.
 - Quantity limits in [622.2](#) are met.
 - Sent via First-Class Package International Service with Registered Mail service.
- Domestic Mail: Mailable only when:
 - Intended for medical or veterinary use, research, or laboratory certification related to the public health.
 - Division 6.2 materials meet the preparation requirements for air transportation and sent via Priority Mail Express, Priority Mail, First-Class Mail, or First-Class Package Service.

Required Packaging

- Must be triple-packaged, meeting the packaging requirements in 49 CFR 173.199. Such materials must be properly packaged to withstand shocks, pressure changes, and other conditions related to ordinary handling in transit, and surrounded by absorbent material sufficient to protect the primary receptacle and to absorb the total amount of liquid should the primary receptacle leak or break.
- The completed triple packaging must be capable of successfully passing the drop test in 49 CFR §178.609(d) at a drop height of at least 1.2 meters (3.9 feet). Following the drop test, there must be no leakage from the primary receptacle, which must remain protected by absorbent material, when required, in the secondary packaging.

Primary Receptacle (Container)

- Each primary receptacle containing a liquid must be leakproof. Each primary receptacle containing a solid must be siftproof.
- A single primary receptacle must not contain more than 1 liter (34 ounces) of a liquid specimen or 4 kg (8.8 pounds) of a solid specimen.
- Two or more primary receptacles whose combined volume does not exceed 4 liters (1 gallon) for liquids or 4 kg (8.8 pounds) for solids may be enclosed in a single secondary container.
- Only small quantities of Class 3, Class 8, Class 9, or other materials in Packing Groups II and III may be used to stabilize or prevent degradation of the sample, provided the quantity of such materials does not exceed 30 mL (1 ounce) or 30 g (1 ounce) in each inner packaging.

Cushioning and Absorbent Material

- The space between the primary receptacle(s) and the secondary container at the top, bottom, and sides must contain enough material to absorb the entire contents of the primary receptacle(s) in case of breakage or leakage.
- Either the primary receptacle or the secondary container must be capable of withstanding, without leakage, an internal pressure that produces a pressure differential of not less than 0.95 bar, 14 psi (95 kPa), and temperatures in the range of –40° F to 131° F (–40° C to 55° C).

Secondary Container

- Secondary containers for liquids must be leakproof. Secondary containers for solids must be siftproof. The secondary packaging must be constructed of a durable material and have a secure sealing method.
- If the primary receptacle does not meet the pressure requirements listed above, then the secondary container must be designed to meet those requirements.
- The secondary container must be marked with the international biohazard symbol shown in [Exhibit 346.321](#).

Note: Only cold packs or dry ice may be used as a refrigerant and must be placed outside of the secondary packaging. Interior supports must be provided to secure the secondary packaging in the original position. If a cold pack is used, the packaging must be leak-proof. If dry ice is used, the container must permit the release of carbon dioxide gas and conform to 49 CFR 173.217. The primary receptacle and secondary packaging must maintain their integrity at the temperature of the refrigerant used, as well as the temperature and pressures of transport by aircraft they could be subjected to if refrigerant were lost, and sufficient absorbent material must be provided to absorb all liquids, including melted ice.

Outer Shipping Container

- The primary and secondary packaging must be enclosed in a rigid outer shipping container. The primary receptacle(s) and the secondary container must be enclosed in a strong outer packaging constructed of fiberboard or other equivalent material.
- At least one surface of the outer shipping container must have a minimum dimension of 3.9 inches by 3.9 inches (100 mm by 100 mm) as required by 49 CFR 173.199. The outer packaging must be of adequate size to accommodate all required shipping information and marks.
- A poly-type mailer bag covering may be acceptable as the outer packaging provided triple packaging is complete, the selvage edge of the wrapping is less than 2 inches, and the required markings and address information are applied both on the interior rigid box and the additional outer polybag wrapping.

Markings

As required by 49 CFR 173.199:

- Each mailpiece (outer shipping container) must be marked on the address side with the proper shipping name “Biological Substance, Category B” and have the diamond marking indicating UN3373 (see [Exhibit 346.12a2](#)). The size of the mark on each side must not be less than 50 mm (1.97 inches) in length, the width of the border lines must be at least 2 mm, and letter and numbers must be at least 6 mm (0.24 inches) high.
- The address side of the outer shipping container must be marked with name and telephone number of a person who is knowledgeable about the material shipped and has comprehensive emergency response and incident mitigation information, or someone who has immediate access to the person with such knowledge and information.
- Orientation arrows are not required on these mailpieces but may be used.
- When dry ice is used, the package must include the markings “Carbon dioxide, solid” or “Dry ice,” and an indication that the material being refrigerated is used for diagnostic or treatment purposes (e.g., frozen medical specimens). As this is the only information required with respect to global transportation regulations for dry ice included with UN3373 shipments, the requirements for dry ice as set forth in USPS Packaging Instruction 9A are not applicable.

Documentation

Each vendor shipping COVID-19 kits must provide clear instructions to end-users regarding the procedures to be followed for preparing the samples and packaging used to transport an Infectious Substance Category B. Shippers must instruct end-users to adhere to all applicable mail-related preparation requirements before mailing to ensure the package is properly prepared for safe transportation.

International Mail

- Substances identified in IMM 135.11b *must* be sent *only* by authorized laboratories to their foreign counterparts in those countries that have indicated a willingness to accept them.

Note: Countries distinguish between infectious and noninfectious (nonregulated) biological substances and may prohibit one or the other or both. See “Prohibitions” in the Individual Country Listings.

- Infectious biological substances can be sent to or received by *only* the following types of institutions:
 - a. Laboratories of local, state, and federal government agencies.
 - b. Laboratories of federally licensed manufacturers of biological products derived from bacteria and viruses.
 - c. Laboratories affiliated with or operated by hospitals, universities, research facilities, and other teaching institutions.
 - d. Private laboratories licensed, certified, recognized, or approved by a public authority.

USPS Packaging Instruction 6D

Sharps Waste and Other Regulated Medical Waste

Regulated medical waste and sharps medical waste known or suspected to contain a Category A infectious substance is not mailable. Regulated medical waste and sharps medical waste as defined in [346.12f](#) and [346.12g](#) and containing materials classified as Category B infectious substances are permitted for mailing provided that all applicable requirements specified in [346.322](#) are met.

For packaging instructions for medical professional packages, refer to [346.322b–d](#).

Proper Shipping Name and ID Number

- Regulated Medical Waste, UN3291.
- Sharps Medical Waste, UN3291.

Required Authorization

- Each vendor of a complete regulated medical waste or sharps waste mailing container system (including all component parts required to safely mail such waste to a storage or disposal facility) must obtain authorization from the Postal Service prior to mailing. The vendor in whose name the authorization is being sought must submit a written request to the manager of Product Classification, Postal Service Headquarters (see [214](#) for address).

Mailability

- International Mail: Prohibited.
- Domestic Mail: Permitted only with merchandise return service via Priority Mail or First-Class Mail.

Required Packaging

General

- Only regulated medical waste and sharps medical waste mailing container systems approved by Postal Service Headquarters may be mailed. Approved packaging must meet all requirements in [346.322b](#), including a leakproof primary receptacle (also puncture-resistant for sharps medical waste), a water-resistant secondary containment system, enough material within the primary receptacle to absorb and retain three times the total liquid allowed within the primary receptacle, and a step-by-step instruction sheet that details the sequence and method of container assembly prior to mailing.

Marking

- Each primary receptacle and outer shipping container must bear a label, which cannot be detached intact, showing the name of the vendor, the USPS Authorization Number, and the container ID number. Place the label on the top or on a side of the container.
- The primary receptacle(s) and the outer shipping container must bear the international biohazard symbol in black with either a fluorescent orange or fluorescent red background as shown in [Exhibit 346.321](#). The symbol on the outer shipping container must be at least 3 inches high and 4 inches wide.
- The outer shipping container must bear a properly prepared merchandise return service label. The merchandise return service permit must be held in the same name as that of the authorized medical waste vendor.
- The outer shipping container must be marked on two opposite side walls with the package orientation marking in 49 CFR 173.312 to identify the proper upright position of the mailpiece during handling.
- Mailpieces containing regulated medical waste or sharps waste must be marked on the address side with the correct UN number and proper shipping name (e.g., “Regulated Medical Waste, UN3291” or “Regulated Medical Waste-Sharps, UN3291”).

Documentation

- Each mailpiece must have a four-part waste shipping paper. The shipping paper must be affixed to the outside of the mailpiece in an envelope or similar carrier that can be easily opened and resealed to allow review of the document. The shipping paper must comply with all applicable requirements imposed by the laws of the state from which the container system is mailed. At a minimum, the information in [Exhibit 346.322c3](#) must be on the shipping paper.

USPS Packaging Instruction 6E

Used Health Care Products

“Used health care product” means a medical, diagnostic, or research device or piece of equipment, or a personal care product used by consumers, medical professionals, or pharmaceutical providers, that does not meet the definition of a diagnostic specimen, biological product, regulated medical waste, or sharps waste, is contaminated with potentially infectious body fluids or materials, and is not decontaminated or disinfected to remove or mitigate the infectious hazard prior to transport.

Proper Shipping Name

- Not applicable.

Mailability

- International Mail: Prohibited.
- Domestic Mail: A used health care product:
 - Known or reasonably suspected to contain a Category A material is not mailable.
 - Not suspected to contain infectious material or that is known, or suspected, to contain Category B infectious substances, and is being returned to the manufacturer or manufacturer's designee, is mailable with air transportation.

Required Packaging

- Each used health care product must be drained of liquid to the extent possible and placed in a watertight primary receptacle designed and constructed to ensure that it remains intact under normal conditions of transport. For a used health care product capable of cutting or penetrating skin or packaging material, the primary receptacle must be capable of retaining the product without puncture of the packaging under normal conditions of transport.

Primary Container

- The primary receptacle must be capable of retaining the product without puncture of the packaging under normal conditions of transport.
- Each primary receptacle must be placed inside a watertight secondary container designed and constructed to ensure that it remains intact under normal conditions of transport.
- The primary receptacle must be marked with the international biohazard symbol shown in [Exhibit 346.321](#).

Secondary Container

- Each primary receptacle must be placed inside a watertight secondary container designed and constructed to ensure that it remains intact under normal conditions of transport.
- The secondary container must also be marked with the international biohazard symbol shown in [Exhibit 346.321](#).

Outer Shipping Container

- The secondary container must be placed inside an outer shipping container with sufficient cushioning material to prevent movement between the secondary container and the outer shipping container. An itemized list of the contents of the primary receptacle and information concerning possible contamination with a Division 6.2 material, including its possible location on the product, must be placed between the secondary container and the outer shipping container.

Marking/Documentation

- A shipping paper and content marking on the outer shipping container are not required.

USPS Packaging Instruction 6F

Forensic Material

Forensic material containing a biological material, such as tissue, body fluid, excreta, or secretions, and sent on behalf of a federal, state, local, or Indian tribal government agency must be packaged under [346.325](#) when it is not known or suspected to contain a Category A or Category B infectious substance. Forensic material known or suspected to contain a Category A infectious substance is not mailable. Forensic material known or suspected to contain a Category B infectious substance as identified in [346.321](#) is mailable via air transportation, when triple-packaged in a primary receptacle, secondary container, and a rigid outer shipping container.

Proper Shipping Name

- Not applicable.

Mailability

- International Mail: Mailable only when:
 - Permitted by the destination country (see the Individual Country Listing in the IMM).
 - They are presented by and to authorized laboratories designated in “International Mail” below in this Packaging Instruction.
 - They meet the Category B infectious substance definition in [346.12a](#).
 - Written approval has been granted by the manager, Product Classification.
 - Quantity limits in [622.2](#) are met.
 - They are triple-packaged (see below), meeting the packaging requirements in 49 CFR 173.199.
 - Sent via First-Class Package International Service with Registered Mail service.
- Domestic Mail: Mailable only when:
 - Intended for medical or veterinary use, research, or laboratory certification related to the public health.
 - Division 6.2 materials meet the preparation requirements for air transportation and sent via Priority Mail Express, Priority Mail, First-Class Mail, or First-Class Package Service.

Required Packaging

- Must be triple-packaged, meeting the packaging requirements in 49 CFR 173.199. Such materials must be properly packaged to withstand shocks, pressure changes, and other conditions related to ordinary handling in transit, and surrounded by absorbent material sufficient to protect the primary receptacle and to absorb the total amount of liquid should the primary receptacle leak or break.

Primary Receptacle (Container)

- Each primary receptacle containing a liquid must be leakproof. Each primary receptacle containing a solid must be siftproof.
- A single primary receptacle must not contain more than 1 liter (34 ounces) of a liquid specimen or 4 kg (8.8 pounds) of a solid specimen.
- Two or more primary receptacles whose combined volume does not exceed 4 liters (1 gallon) for liquids or 4 kg (8.8 pounds) for solids may be enclosed in a single secondary container.

Cushioning and Absorbent Material

- The space between the primary receptacle(s) and the secondary container at the top, bottom, and sides must contain enough material to absorb the entire contents of the primary receptacle(s) in case of breakage or leakage.
- Either the primary receptacle or the secondary container must be capable of withstanding, without leakage, an internal pressure that produces a pressure differential of not less than 0.95 bar, 14 psi (95 kPa), and temperatures in the range of –40° F to 131° F (–40° C to 55° C).

Secondary Container

- Secondary containers for liquids must be leakproof. Secondary containers for solids must be siftproof. The secondary packaging must be constructed of a durable material and have a secure sealing method.
- If the primary receptacle does not meet the pressure requirements listed above, then the secondary container must be designed to meet those requirements.
- The secondary container must be marked with the international biohazard symbol shown in [Exhibit 346.321](#).

Outer Shipping Container

- The primary and secondary packaging must be enclosed in a rigid outer shipping container. The primary receptacle(s) and the secondary container must be enclosed in a strong outer packaging constructed of fiberboard or other equivalent material.
- At least one surface of the outer shipping container must have a minimum dimension of 3.9 inches by 3.9 inches (100 mm by 100 mm) as required by 49 CFR 173.199.

Marking/Documentation

- Category B infectious substances not present:
 - A shipping paper and content markings on the outer shipping container are not required.
 - Each mailpiece must have a complete delivery and return address.

- Category B infectious substances are present:
 - Each mailpiece (outer shipping container) must be marked with the proper shipping name “Biological Substance, Category B” and have the diamond marking indicating UN3373 (see [Exhibit 346.12a2](#)).
 - The address side of the outer shipping container must be marked with name and telephone number of a person who is knowledgeable about the material shipped and has comprehensive emergency response and incident mitigation information, or someone who has immediate access to the person with such knowledge and information.
 - Orientation arrows are not required on these mailpieces but may be used.

International Mail

Substances identified in IMM 135.11b *must* be sent *only* by authorized laboratories to their foreign counterparts in those countries that have indicated a willingness to accept them.

Note: Countries distinguish between infectious and noninfectious (nonregulated) biological substances and may prohibit one or the other or both. See “Prohibitions” in the Individual Country Listings.

- Infectious biological substances can be sent to or received by *only* the following types of institutions:
 - Laboratories of local, state, and federal government agencies.
 - Laboratories of federally licensed manufacturers of biological products derived from bacteria and viruses.
 - Laboratories affiliated with or operated by hospitals, universities, research facilities, and other teaching institutions.
 - Private laboratories licensed, certified, recognized, or approved by a public authority.

USPS Packaging Instruction 6G

Nonregulated Infectious Materials

Nonregulated materials as defined in [346.234](#) are not subject to regulation as hazardous materials but must be properly packaged when presented for mailing. Nonregulated materials include biological product, blood collected for the purpose of blood transfusion, blood products and blood components collected for the purpose of transfusion, dried blood spots, forensic material not expected of containing a Category A or Category B infectious substance and transported on behalf of a government agency. For a complete description of nonregulated materials, see [346.234](#).

Proper Shipping Name and ID Number

- Not applicable (not regulated under 49 CFR as a hazardous material in domestic commerce).

Mailability

- International Mail: Nonregulated materials identified in [346.234](#) are mailable but must be properly packaged as indicated in [346.325](#) when presented for mailing.
- Domestic Mail: Permitted via air or surface transportation when packaging requirements are met.

Required Packaging**Liquid Patient Specimens and Biological Products****Exceeding 50 ml**

- Material must be packaged in a securely sealed primary receptacle. A single primary receptacle must not contain more than 500 ml of specimen. Two or more primary receptacles whose combined volume does not exceed 500 ml may be enclosed in a single secondary container. The secondary container must be securely and snugly enclosed in a fiberboard box or container of equivalent strength that serves as the outer shipping container.

Not Exceeding 50 ml

- A patient specimen or biological product consisting of 50 ml or less per mailpiece must be packaged in a securely sealed primary receptacle. Two or more primary receptacles whose combined volume does not exceed 50 ml may be enclosed within a single mailpiece. The secondary container can also serve as the outer shipping container. In that case, the biohazard symbol must appear on the inner packaging or on the primary container.

Absorbent and Cushioning Material

- Sufficient absorbent material and cushioning material to withstand shock and pressure changes must surround the primary receptacle(s), or be otherwise configured to take up the entire liquid contents in case of leakage.

Secondary Container

- The secondary container must be securely sealed, and it may serve as the outer shipping container if it has sufficient strength to withstand ordinary postal processing.
- The primary receptacle(s) and the absorbent cushioning must be enclosed in a secondary container with a leakproof barrier that can prevent failure of the secondary container if the primary receptacle(s) should leak during transport.
- The secondary container must be marked with the international biohazard symbol shown in [Exhibit 346.321](#), except when the secondary container also serves as the outer shipping container. In that case, the biohazard symbol must appear on the inner packaging or on the primary container.

Outer Shipping Container

- A fiberboard box or container of equivalent strength that serves as the outer shipping container.
- When the secondary container also serves as the outer shipping container, the biohazard symbol must appear on the inner packaging or on the primary container.

Solid or Dry Specimen**Primary Receptacle**

- The primary receptacle (and cushioning material, if required) must be enclosed in a secondary container.

Secondary Container

- The secondary container must be siftproof to contain the contents should the primary receptacle(s) leak.
- The secondary container must be marked with the international biohazard symbol (see [Exhibit 346.321](#)).

Outer Shipping Container

- The secondary container may serve as the outer shipping container if it has sufficient strength to withstand ordinary postal processing.

Markings

- A complete return address and delivery address must be used.
- No other identifying marks are allowed on the outside of the box.

Note: A shipper's declaration for dangerous goods (shipping papers) is not required for clinical specimens that do not contain infectious substances.

USPS Packaging Instruction 6H

Exempt Human or Animal Specimens

Exempt human or animal specimens as defined in [346.12d](#) are not subject to regulation as hazardous materials, but when presented for mailing, they must be properly packaged. See [346.326](#).

“Exempt human or animal specimen” means a human or animal sample (including, but not limited to, secret, excreta, blood and its components, tissue and tissue fluids, and body parts) transported for routine testing not related to the diagnosis of an infectious disease.

Typically, exempt human specimens are specimens for which there is a low probability that the sample is infectious, such as specimens for drug or alcohol testing; cholesterol testing; blood glucose level testing; prostate-specific antigens (PSA) testing; testing to monitor heart, kidney, or liver function; pregnancy testing; and testing for diagnosis of noninfectious diseases such as cancer biopsies.

Proper Shipping Name

- Not applicable (not regulated under 49 CFR as a hazardous material in domestic commerce).

Mailability

- International Mail: Mailable. They are not subject to regulation as hazardous materials, but when presented for mailing, they must be packaged as identified in [346.326](#).
- Domestic Mail: Permitted via air or surface transportation when packaging requirements are met.

Required Packaging**Primary Receptacle**

- Material must be triple-packaged in leakproof (for liquids) or siftproof (for solids) primary receptacles.
- A single primary receptacle must not contain more than 500 ml of a liquid specimen or 500 grams of a solid specimen.
- Two or more primary receptacles whose combined volume does not exceed 500 ml (for liquids) or 500 grams (for solids) may be enclosed in a single secondary container.
- Sufficient cushioning and absorbent materials must surround each primary receptacle containing liquid.

Secondary Container

- The secondary container cannot serve as the outer shipping container.
- The secondary container must be securely and snugly enclosed in a fiberboard box or container of equivalent strength that serves as the outer shipping container. The outer shipping container must be rigid.
- The secondary container must be marked with the international biohazard symbol shown in [Exhibit 346.321](#).

Marking/Documentation

- The outer shipping container must be marked on the address side with the words “Exempt human specimen” or “Exempt animal specimen,” as appropriate. In addition, at least one surface of the outer packaging must have a minimum dimension of 3.9 inches by 3.9 inches (100 mm by 100 mm).
- A shipping paper is not required.

USPS Packaging Instruction 7A

Radioactive Materials

Radioactive materials are prohibited in international mail and domestic mail if required to bear the DOT Radioactive White-I, Radioactive Yellow-II, Radioactive Yellow-III label, or the Fissile label (49 CFR 172.436, 172.438, or 172.440, respectively) or if it contains quantities of radioactive material in excess of those authorized in [347](#). Radioactive materials are prohibited in domestic mail via air transportation. For international mail, the standards in IMM 135.5 apply.

The only categories of radioactive material that are mailable are those that can be classified as a “limited quantity” under 49 CFR and that meet the limits in [Exhibit 347.22](#): excepted instruments, articles, and devices, and excepted articles containing natural uranium and thorium. Accurate documentation of the activity limits, which must not exceed those specified in [Exhibit 347.22](#), must be provided.

Proper Shipping Name and ID Number

- Radioactive Material, excepted package-limited quantity, UN2910.
- Radioactive Material, excepted package-instruments or articles, UN2911.
- Radioactive Material, excepted package-articles manufactured from natural uranium (or natural thorium), UN2909.

Mailability

- International Mail: Only as permitted in [622.3](#) and IMM 135.5, and when sent with under the following conditions:
 - Sent only to those countries that have expressed a willingness to accept them (see the Individual Country Listings in the IMM).
 - Each radioactive materials shipment must be sent via First-Class Package International Service using Registered Mail service.
 - Mailable radioactive materials may not have an activity content that exceeds one-tenth of the limits in [Exhibit 347.22](#)
 - Each shipment must comply with both the International Atomic Energy Agency Regulations and the specifications contained in [347](#) and this section.
 - The sender and recipient of each radioactive materials shipment must receive prior authorization from the appropriate regulatory authorities within their countries.
 - A white package label bearing the French words “Matieres Radioactives” (Radioactive Materials) must be securely affixed, taped, or gummed to the address side of each mailpiece containing radioactive materials. The sender is responsible for supplying and affixing this label to the mailpiece.
 - The address side of each mailpiece must bear the following endorsements in bold letters: “Return to Sender in Case of Nondelivery” and “Radioactive Materials, Quantities Permitted for Movement by Post.”
 - A shipper’s declaration for dangerous goods is required. See [326](#) and [725.3](#).
- Domestic Mail: Permitted only via surface transportation and when the applicable requirements in [347](#) are met.

Required Packaging

Separate packaging requirements apply as follows.

- Domestic Mail for Limited Quantities (49 CFR 173.421) whose activity per package does not exceed the limits specified in [Exhibit 347.22](#):
 - Primary Receptacle:
 - The materials are packaged in strong, tight inner receptacles that will not leak any of the radioactive materials during normal Postal Service handling.
 - Absorbent and Cushioning Material:
 - Sufficient and suitably positioned absorbent material capable of absorbing at least twice the volume of the liquid contents in the event of leakage is required.
 - Adequate cushioning material to withstand shock and pressure changes must surround the primary receptacle.
 - Secondary Packaging:
 - Liquid radioactive materials must be packaged within a leak-resistant and corrosion-resistant secondary packaging.
 - Outer Packaging:
 - The inner receptacle and the secondary packaging (when required) must be securely packed within a strong outer packaging.
 - The radiation level at any point on the external surface of the mailpiece must not exceed 0.5 millirem per hour.
 - The nonfixed (removable) radioactive surface contamination on the external surface of the mailpiece does not exceed the applicable limits specified in 49 CFR 173.443(a).
 - The package does not contain fissile material unless excepted by 49 CFR 173.453.
 - No single dimension of the external mailpiece can be less than 2.5 centimeters (1 inch), and the length and girth can be no less than 30 centimeters (12 inches).
 - Marking:
 - The outside of the inner receptacle or the outside of the secondary packaging must be clearly marked “Radioactive.”
 - The address side of the mailpiece must clearly display the following marking: “This package conforms to the conditions and limitations specified in 49 CFR 173.421 for radioactive material, excepted package-limited quantity of material, UN2910 and is within Postal Service activity limits for mailing.”
 - A complete return address and delivery address must be used.

- Domestic Mail for Mailable Instruments and Articles (49 CFR 173.424) permitted under [347](#):

Instruments and manufactured articles (including clocks, electronic tubes, or apparatus) or similar devices having radioactive materials in gaseous or nondispersible solid form as a component part must be packed as follows:

 - Primary Receptacle:
 - The activity of the instrument or device must not exceed the relevant limit listed in [Exhibit 347.22](#).
 - The radiation level at 10 centimeters (4 inches) from any point on the external surface of the unpackaged instrument or device must not exceed 10 millirem per hour.
 - Cushioning Material:
 - Adequate cushioning material to withstand shock and pressure changes must surround the primary receptacle.
 - Outer Packaging:
 - The inner receptacle and cushioning material must be securely packed within a strong outer packaging.
 - The total activity per mailpiece must not exceed the relevant limit listed in [Exhibit 347.22](#).
 - The radiation level at any point on the external surface of the mailpiece containing the device or instrument must not exceed 0.5 millirem per hour.
 - The nonfixed (removable) radioactive surface contamination on the external surface of the mailpiece must not exceed the applicable limits specified in 49 CFR 173.443(a).
 - The package does not contain fissile material unless excepted by 49 CFR 173.453.
 - At least one external dimension of the mailpiece must be no less than 10 centimeters (4 inches).
 - Marking:
 - The outside of the inner receptacle or the outside of the secondary packaging must be clearly marked “Radioactive.”
 - The address side of the mailpiece must clearly display the following marking: “This package conforms to the conditions and limitations specified in 49 CFR 173.424 for radioactive material, excepted package-instruments or articles, UN2911 and is within Postal Service activity limits for mailing.”
 - A complete return address and delivery address must be used.

- Domestic Mail for Mailable Excepted Articles Containing Uranium or Thorium (49 CFR 173.426) permitted under [347](#):
Manufactured articles excepted under [347](#) and in which the sole radioactive material is natural or depleted uranium or natural thorium must be packaged as follows:
 - Primary Receptacle:
 - The outer surface of the uranium or thorium is enclosed in an inactive sheath made of metal or other durable protective material.
 - Cushioning Material:
 - Adequate cushioning material to withstand shock and pressure changes must surround the primary receptacle.
 - Outer Packaging:
 - The inner receptacle and cushioning material must be securely packed within a strong outer packaging.
 - The radiation level at any point on the external surface of the mailpiece must not exceed 0.5 millirem per hour.
 - The nonfixed (removable) radioactive surface contamination on the external surface of the mailpiece must not exceed the applicable limits specified in 49 CFR 173.443(a).
 - Marking:
 - The outside of the inner receptacle or the outside of the secondary packaging must be clearly marked “Radioactive.”
 - The address side of the mailpiece must clearly display the following marking: “This package conforms to the conditions and limitations specified in 49 CFR 173.426 for radioactive material, excepted package-articles manufactured from natural uranium (or natural thorium), UN2909 and is within Postal Service activity limits for mailing.”
 - A complete return address and delivery address is required.

Note: A shipper's declaration for dangerous goods is not required for mailable radioactive materials.
- International Mail:
The requirements specified in [622.3](#) and IMM 135.5 apply in addition to the packaging instructions for domestic mail.

USPS Packaging Instruction 8A

Corrosives

A corrosive is any liquid or solid that causes visible destruction or irreversible alteration in human skin tissue at the site of contact or a liquid that has a severe corrosion rate on steel or aluminum.

A Class 8 corrosive material that qualifies as a Limited Quantity air or Limited Quantity surface material is permitted via air or surface transportation in domestic mail provided that all applicable requirements in [348](#) are met.

Proper Shipping Name

- Various (see Appendix [A](#)).

ID Number

- Various (see Appendix [A](#)).

Mailability

- International Mail: Prohibited.
- Domestic Mail: Permitted via air or surface transportation when packaging requirements are met.

Required Packaging

Separate packaging requirements apply for liquids and solids.

- For Mailable Liquid Corrosives:
 - General:
 - Liquid Corrosive. A liquid mixture must be 1 pint (16 ounces) or less, and must contain 15 percent or less corrosive material with the remainder of the mixture not being a hazardous material, unless otherwise specified for a specific corrosive material.
 - Primary Receptacles:
 - Primary receptacles must be securely sealed compatible glass bottles.
 - The primary receptacle must be tightly sealed with a screw cap having a minimum of one-and-one-half turns, a soldering clip, or other means to effect secure closure. A friction-top closure is not acceptable.
 - Volume per primary receptacle is limited to 16 ounces.
 - Multiple primary receptacles are permitted.
 - Absorbent and Cushioning Material:
 - A noncombustible absorbent material that is capable of taking up all liquid in case of leakage must surround the primary receptacle.
 - Cushioning material must surround the primary receptacle to prevent breakage.

- Secondary Packaging:
 - The secondary packaging container must be constructed of metal or plastic and be compatible with the design of the primary receptacle.
 - The secondary container must be tightly sealed with a screw cap having a minimum of one-and-one-half turns, a soldering clip, or other means to effect secure closure. A friction-top closure is not acceptable.
- Outer Shipping Container:
 - The primary receptacle, absorbent material, cushioning material, and secondary packaging must be packed in a strong outer packaging.
 - Each mailpiece must not exceed a total weight of 25 pounds.
- Marking:

The following labels and text markings must be placed on the address side of the mailpiece unless specified in [221.1](#) and [325.1](#).

 - For air transportation, mailpieces must bear the DOT Limited Quantity air mark (with the symbol “Y” in the center), an approved DOT Class 8 hazardous material warning label, the identification number and the proper shipping name
 - For surface transportation, the outer packaging must bear an approved DOT Limited Quantity surface mark designating surface transportation, prepared under [348.4b](#).
 - A complete return and delivery address must be used.
- Documentation:
 - For air transportation, a properly completed shipper's declaration for dangerous goods must be prepared in triplicate and affixed to the outside of the mailpiece.
- For Mailable Solid Corrosives:
 - General:
 - A solid mixture must be 10 pounds or less per primary receptacle and must contain 10 percent or less corrosive material with the remainder of the mixture not being a hazardous material, unless otherwise specified for a specific corrosive solid.
 - Primary Receptacle:
 - Each primary receptacle must be siftproof and be securely sealed.
 - Secondary Packaging:
 - Each primary receptacle must be packed within a siftproof secondary packaging container that is compatible with the primary receptacle.

- Outer Packaging:
 - The primary receptacle and the compatible secondary packaging containers must be snugly packed within a strong outer packaging.
 - Multiple primary receptacles and compatible secondary packaging containers may be packed within a single outer packaging up to a total weight of 25 pounds per mailpiece.
- Marking:

The following labels and text markings must be placed on the address side of the mailpiece unless specified in [221.1](#) and [325.1](#).

 - For air transportation, mailpieces must bear the DOT Limited Quantity air mark (with the symbol “Y” in the center), an approved DOT Class 8 hazardous material warning label, the identification number, and the proper shipping name
 - For surface transportation, the outer packaging must bear an approved DOT Limited Quantity surface mark designating surface transportation, prepared under [348.4b](#).
 - A complete return and delivery address must be used.
- Documentation:
 - For air transportation, a properly completed shipper's declaration for dangerous goods must be prepared in triplicate and affixed to the outside of the mailpiece.

USPS Packaging Instruction 8B

Nonspillable Wet Battery

A nonspillable wet battery containing liquid electrolyte is prohibited from mailing unless the battery casing is completely sealed to prevent the liquid corrosive from spilling during handling, as allowed in [348](#). Nonspillable batteries with UN2800 are prohibited in international mail, but they may be sent as domestic mail via air or surface transportation when properly packaged. Nonspillable wet batteries mailed in accordance with these instructions must meet all applicable conditions in 49 CFR 173.159a.

Proper Shipping Name

- Nonspillable Battery.

ID Number

- UN2800.

Mailability

- International Mail: Prohibited.
- Domestic Mail: Permitted via air or surface transportation when packaging requirements are met.

Required Packaging

Primary Receptacle

- The nonspillable battery must be capable of withstanding the vibration and pressure differential tests cited in 49 CFR 173.159(f) (1) and (2).

Absorbent and Cushioning Material

- The nonspillable battery must be protected from short circuits with protective or cushioning material.
- A noncombustible material that is capable of absorbing all liquid in case of leakage must surround the primary receptacle.

Outer Packaging

- The nonspillable battery must be securely packaged in a strong fiberboard box.
- Only one nonspillable battery is allowed per mailpiece.
- The total weight of a single mailpiece cannot exceed 25 pounds.

Marking

- The outer packaging must be plainly and durably marked on the address with the text “NONSPILLABLE BATTERY, UN2800.”
- Each mailpiece must include the mailer and addressee names and have a complete delivery and return address.

Note: A shipper's declaration for dangerous goods is not required for nonspillable wet batteries sent via air transportation as exempted in 49 CFR 173.159a.

USPS Packaging Instruction 8C

Manufactured Devices that Contain Small Amounts of Mercury

A corrosive is any liquid or solid that causes visible destruction or irreversible alteration in human skin tissue at the site of contact or a liquid that has a severe corrosion rate on steel or aluminum.

A Class 8 manufactured article that contains minute amounts of mercury (such as compact fluorescent lamps [CFLs]) that meets the standards below is permitted in domestic mail provided all the applicable requirements in [348.22g](#) are met.

Proper Shipping Name

- Mercury contained in manufactured articles

ID Number

- UN3506

Mailability

- International Mail. Prohibited
- Domestic Mail: Permitted via air or surface transportation when packaging requirements are met.

Required Packaging**Primary Receptacle**

- Each primary device, article, or apparatus must be a securely sealed glass, or equivalent material, enclosure.
- Each device, article, or apparatus must be cushioned and separated from other items and must not exceed 100 milligrams (mg) (0.0035 ounce) of mercury.
- Multiple devices are permitted within a single mailpiece, provided the aggregate mercury quantity does not exceed 1 gram (g) (0.035 ounce) of mercury within the mailpiece.

Absorbent and Cushioning Material

A noncombustible absorbent/cushioning material, capable of containing any leakage in case of breakage, must surround each device.

Outer Shipping Container

The device(s), and its absorbent/cushioning material, must be packed in rigid, strong outer packaging.

Marking

The following labels and text markings must be placed on the address side of the mailpiece unless specified in [221.1](#) and [325.1](#).

- Each mailpiece must bear the marking “Manufactured Devices Containing Less Than 100 mg Mercury.”
- For air transportation, mailpieces must bear the DOT Limited Quantity air mark (with the symbol “Y” in the center), an approved DOT Class 8 hazardous material warning label, the identification number, and the proper shipping name
- For surface transportation, the outer packaging must bear an approved DOT Limited Quantity surface mark designating surface transportation, prepared under [348.4b](#).
- A complete return and delivery address must be used.

Documentation

- For air transportation, a properly completed shipper's declaration for dangerous goods must be prepared in triplicate and affixed to the outside of the mailpiece.

USPS Packaging Instruction 9A

Dry Ice (Carbon Dioxide Solid)

When dry ice is enclosed in a thick metal or other restricting type of container, a build-up of internal pressure could cause the container to rupture or explode. Dry ice is permitted to be sent in domestic mail when it is used as a refrigerant to cool the contents of a mailable hazardous or nonhazardous material, provided that all applicable requirements in [349](#) are met.

Proper Shipping Name

- Carbon Dioxide Solid or Dry Ice.

ID Number

- UN1845.

Mailability

- International Mail: Prohibited.
- Domestic Mail: Permitted with restriction via air or surface transportation.

Required Packaging

General

- Packages containing dry ice must be packed in containers that permit the release of carbon dioxide gas and conform to 49 CFR 173.217 and 175.10(a)(10). If a fiberboard box is used, enough insulation is necessary to prevent condensation and wetting of the mailing carton.
- For air transportation, each mailpiece may *not* contain more than 5 pounds of dry ice.
- For surface transportation, a mailpiece may contain more than 5 pounds of dry ice.

Marking

- Each mailpiece must be clearly marked on the address side with the name of the contents being cooled (such as frozen medical specimens, steaks) and the net weight of the dry ice.
- For air transportation, each mailpiece must bear a Class 9 DOT miscellaneous hazardous material warning label and must be clearly marked “Carbon Dioxide Solid, UN1845” Or “Dry Ice, UN1845.”
- For surface transportation, each mailpiece must be clearly marked “Surface Only” or “Surface Mail Only” and “Carbon Dioxide Solid, UN1845” or “Dry Ice, UN1845.”

Documentation

- For air transportation, a properly completed shipper's declaration for dangerous goods must be prepared in triplicate and affixed to the outside of the mailpiece.

Note: A shipper's declaration and a Class 9 DOT warning label are not required for dry ice sent via domestic surface mail. Mailpieces containing dry ice that are prepared for surface transportation must not, under any circumstances, be routed via air transportation.

USPS Packaging Instruction 9B

Magnetized Materials

A magnetized material is an article that has a magnetic field strength capable of causing the deviation of aircraft instruments. Magnetized materials include magnets and magnetized devices such as magnetrons and light meters of sufficient strength to possibly cause erroneous aircraft magnetic compass readings. Magnetized materials are mailable, provided that all requirements in [349.24](#) are met.

Proper Shipping Name and ID Number

- Not applicable.

Mailability

- International Mail: Only non-regulated magnetized materials that have a magnetic field strength less than 0.002 gauss at a distance of 7 feet may be sent internationally. Magnetized materials which are regulated are prohibited. See [622.4](#).
- Domestic Mail via Air Transportation: Magnetized materials that have a magnetic field strength greater than 0.00525 gauss at 15 feet are prohibited. A magnetic field strength less than 0.002 gauss at a distance of 7 feet is not regulated.
- Domestic Mail via Surface Transportation: Magnetized material is not regulated as a hazardous material when transported via surface transportation.

Required Packaging**General**

- Magnets and magnetic devices such as magnetrons and light meters must be packaged with the polarities of each unit positioned to oppose one another.
- Keeper bars must be installed on permanent magnets or must otherwise be shielded to prevent the magnetic field from affecting magnetic compasses.
- Mailable materials must be packed in strong outer containers.

Marking

- For air transportation, the address side of the outer packaging must bear the magnetized material warning label shown in [Exhibit 349.242b](#).
- For surface transportation, mailpieces containing magnetized material with unconfined fields must be clearly marked on the address side with “Surface Only” or “Surface Mail Only” and “Magnetic - Keep 7 Feet Away From Navigational Equipment.”
- A complete return address and delivery address must be used.

Documentation

- For air transportation, a properly completed shipper's declaration for dangerous goods must be prepared in triplicate and affixed to the outside of the mailpiece. Magnetized material is not regulated as a hazardous material when transported via surface transportation.

USPS Packaging Instruction 9C

Miscellaneous Hazardous Materials

A Class 9 miscellaneous hazardous material that qualifies as a Limited Quantity material within the Postal Service is permitted in domestic mail provided all applicable requirements in [349](#) are met.

Proper Shipping Name

- Consumer Commodity.

ID Number

- Various (see Appendix [A](#)).

Mailability

- International Mail: Prohibited.
- Domestic Mail: Permitted via air or surface transportation. Flammable materials are prohibited from air transportation.

Required Packaging**Primary Receptacle**

- For liquids, the capacity of the primary receptacle must not exceed 1 pint.
- For solids, the weight of the primary receptacle and its contents must not exceed 1 pound.
- Multiple primary receptacles are permitted.

Cushioning Material

- Enough cushioning material must surround the primary receptacle to prevent breakage and absorb all potential leakage.

Outer Packaging

- A strong outer packaging that is capable of firmly and securely holding the primary receptacle and cushioning material is required.
- Each mailpiece must not exceed a total weight of 25 pounds.

Marking

The following labels and text markings must be placed on the address side of the mailpiece unless specified in [221.1](#) and [325.1](#).

- For air transportation, mailpieces must bear the DOT Limited Quantity air mark (with the symbol “Y” in the center), an approved DOT Class 9 hazardous material warning label, Identification Number “ID8000,” and the proper shipping name “Consumer Commodity.”
- For surface transportation, the outer packaging must bear an approved DOT Limited Quantity surface mark designating surface transportation, prepared under [349.4b](#).
- A complete return and delivery address must be used.

Documentation

- For air transportation, a mailable material must have a properly completed shipper's declaration for dangerous goods prepared in triplicate and affixed to the outside of the mailpiece.

USPS Packaging Instruction 9D

Lithium Metal and Lithium-ion Cells and Batteries — Domestic

Lithium metal (nonrechargeable) cells and batteries and lithium-ion (rechargeable) cells and batteries are mailable in limited quantities domestically via air or surface transportation when they are installed in or packed with the equipment they are intended to operate. Unless otherwise excepted, lithium metal and lithium-ion batteries (without equipment) are mailable in limited quantities domestically via surface transportation only.

Proper Shipping Name

- Lithium Metal Battery.
- Lithium-ion Battery.

ID Number

- Lithium-ion Battery, UN3480.
- Lithium Metal Battery, UN3090.
- Lithium-ion Battery contained in equipment, UN3481.
- Lithium-ion Battery packed with equipment, UN3481.
- Lithium Metal Battery contained in equipment, UN3091.
- Lithium Metal Battery packed with equipment, UN 3091.

Mailability

- Lithium metal and lithium-ion cells and batteries *installed in or packed with* equipment are mailable via air or surface transportation.
- Lithium-ion (*or lithium polymer*) batteries may be mailed, in limited quantities, via air transportation when both shipped from, and intended for delivery to, the state of Alaska under [349.222](#).
- Except as provided above, individual *lithium metal (or lithium alloy)* and *lithium-ion (or lithium polymer)* batteries (without equipment) are mailable in limited quantities via surface transportation only, provided the batteries are in the originally sealed packaging, and packaged and marked as described in [349.221](#) and [349.222](#), as applicable.

Required Packaging

Lithium Metal and Lithium-ion Batteries

- Packaging must meet all applicable requirements specified in 49 CFR 173.185. Except for mailpieces containing button cell batteries properly installed in the equipment they are intended to operate, mailpieces containing mailable lithium metal or lithium-ion batteries must be rigid, sealed, and of adequate size, so the lithium battery mark can be affixed to the address side without the mark being folded.
- Packaging must be strong enough to prevent crushing of the package or exposure of the contents during normal handling in the mail.
- The use of padded and poly bags as outer packaging is permitted only when the mailpieces contain button cell batteries meeting the classification criteria in [349.11d](#), the batteries are properly installed in the equipment they are intended to operate, and the batteries are afforded adequate protection by that equipment.
- All outer packages must have a complete delivery and return address.

Markings

- **Lithium metal** batteries properly *installed in* the equipment they are intended to operate:
 - Except for mailpieces containing button cell batteries installed in equipment (including circuit boards), or no more than 4 lithium metal cells or 2 lithium metal batteries installed in the equipment they operate, mailpieces containing lithium metal batteries must bear a DOT-approved lithium battery mark, as specified in 49 CFR 173.185(c)(3)(i) and [Exhibit 325.2a](#), applied to the address side of the mailpiece.
 - The mark must indicate UN3091 for lithium metal cells or batteries installed in equipment.
 - Where a package contains lithium cells or batteries assigned to different UN numbers, all applicable UN numbers must be indicated.
 - The mark must also include a telephone number for those who need to obtain additional information.

Note: DOT-approved lithium battery markings must be applied to all mailpieces when there are more than two mailpieces in a single consignment as defined in [349.12b](#).

- **Lithium metal** batteries *packed with* the equipment they are intended to operate:
 - Mailpieces must bear a DOT-approved lithium battery mark, as specified in 49 CFR 173.185(c)(3)(i) and [Exhibit 325.2a](#), applied to the address side of the mailpiece.
 - The mark must indicate UN3091 for lithium metal cells or batteries packed with equipment.
 - The mark must also include a telephone number for those who need to obtain additional information.
- **Lithium metal** batteries *not packed with or installed in* equipment (individual batteries):
 - Mailpieces must bear a DOT-approved lithium battery mark, as specified in 49 CFR 173.185(c)(3)(i) and [Exhibit 325.2a](#), applied to the address side of the mailpiece.
 - The mark must indicate UN3090 for lithium metal cells or batteries.
 - The mark must also include a telephone number for those who need to obtain additional information.
 - Mailpieces must also include the text “Surface Mail Only, Primary Lithium Batteries — Forbidden for Transportation Aboard Passenger Aircraft” or “Surface Mail Only, Lithium Metal Batteries — Forbidden for Transportation Aboard Passenger Aircraft.”
- **Lithium-ion** batteries properly *installed in* the equipment they are intended to operate:
 - Except for mailpieces containing button cell batteries installed in equipment (including circuit boards), or no more than 4 lithium-ion cells or 2 lithium-ion batteries installed in the equipment they operate, mailpieces containing lithium-ion batteries must bear a DOT-approved lithium battery mark, as specified in 49 CFR 173.185(c)(3)(i) and [Exhibit 325.2a](#), applied to the address side of the mailpiece.
 - The mark must indicate UN3481 for lithium-ion cells or batteries installed in equipment.
 - The mark must also include a telephone number for those who need to obtain additional information.

Note: DOT-approved lithium battery markings must be applied to all mailpieces when there are more than two mailpieces in a single consignment as defined in [349.12b](#).

- **Lithium-ion** batteries *packed with* the equipment they are intended to operate:
 - Mailpieces must bear a DOT-approved lithium battery mark, as specified in 49 CFR 173.185(c)(3)(i) and [Exhibit 325.2a](#), applied to the address side of the mailpiece.

- The mark must indicate UN3481 for lithium-ion cells or batteries packed with equipment.
- Where a package contains lithium cells or batteries assigned to different UN numbers, all applicable UN numbers must be indicated.
- The mark must also include a telephone number for those who need to obtain additional information.
- **Lithium-ion batteries *not packed with or installed in* equipment (individual batteries):**
 - Mailpieces must bear a DOT-approved lithium battery mark, as specified in 49 CFR 173.185(c)(3)(i) and [Exhibit 325.2a](#), applied to the address side of the mailpiece.
 - The mark must indicate UN3480 for lithium-ion cells or batteries.
 - The mark must also include a telephone number for those who need to obtain additional information.
 - Mailpieces must also include the text “Surface Mail Only, Secondary Lithium Batteries — Forbidden for Transportation Aboard Passenger Aircraft” or “Surface Mail Only, Lithium-ion Batteries — Forbidden for Transportation Aboard Passenger Aircraft.”

Quantities

Domestic — Lithium Metal Cells and Batteries:

Installed in or packed with the equipment they are intended to operate:

- Each cell must contain no more than 1.0 gram of lithium content.
- Each battery must contain no more than 2.0 grams aggregate lithium content.
- The shipment cannot contain more batteries than the number needed to operate the device.
- Each mailpiece must contain no more than 8 cells or 2 batteries.

Individual batteries mailed without equipment:

- Each cell must contain no more than 1.0 gram of lithium content.
- Each battery must contain no more than 2.0 grams aggregate lithium content.
- The mailpiece must not exceed 5 pounds.

Domestic — Lithium-ion Cells and Batteries:

Installed in or packed with the equipment they are intended to operate:

- The total watt-hour rating for each cell must not exceed 20 Wh.
- The total watt-hour rating for each battery must not exceed 100 Wh.
- Each mailpiece must contain no more than 8 cells or 2 batteries.

Individual batteries mailed without equipment:

- The total watt-hour rating for each cell must not exceed 20 Wh.
- The total watt-hour rating for each battery must not exceed 100 Wh.
- The mailpiece must not exceed 5 pounds.

Domestic — Small Lithium Metal or Lithium-ion Batteries

Very small, consumer-type batteries, installed in equipment, or packed with equipment:

- Each lithium metal or lithium alloy cell or battery must contain no more than 0.3 gram of lithium content.
- Each lithium-ion or lithium polymer cell or battery must not exceed a watt-hour rating of 2.7 Wh.
- No limit on the number of cells/batteries.
- Each mailpiece must not exceed 2.5 kilograms (5.5 pounds) total weight.

Domestic Lithium Battery Mailability Exhibit

| | Surface Transportation | Air Transportation | Mailpiece Limitations¹ |
|--|---|-------------------------------|--|
| Lithium Metal or Lithium Alloy Batteries^{2, 3} | | | |
| <i>Small, non-rechargeable, consumer-type batteries</i> | | | |
| Contained in (properly installed in equipment) | Mailable | Mailable | 8 cells or 2 batteries 11lbs. |
| Packed with equipment, but not installed in the equipment | Mailable | Mailable | 8 cells or 2 batteries 11lbs. |
| Without the equipment they operate (individual batteries in originally sealed packaging) | Mailable | Prohibited | 5 lbs. |
| Lithium-ion or Lithium Polymer Batteries^{4, 5} | | | |
| <i>Small, rechargeable, consumer-type batteries</i> | | | |
| Contained in (properly installed in equipment) | Mailable | Mailable | 8 cells or 2 batteries |
| Packed with equipment, but not installed in the equipment | Mailable | Mailable | 8 cells or 2 batteries |
| Without the equipment they operate (individual batteries in originally sealed packaging) | Mailable | Prohibited | 5 lbs. |
| Without the equipment they operate (individual batteries in originally sealed packaging) (Intra-Alaska only) | * | Mailable | 8 cells or 2 batteries |
| Very Small Lithium Metal or Lithium-ion Batteries^{6, 7} | | | |
| <i>Exception for very small consumer-type batteries in USPS air transportation</i> | | | |
| Contained in (properly installed in equipment) | Mailable | Mailable | No limit on cells/ batteries 5.5 lbs. |
| Packed with equipment, but not installed in the equipment | Mailable | Mailable | No limit on cells/ batteries 5.5 lbs. |
| Damaged/Recalled Batteries | Prohibited, unless approved by the manager, Product Classification. | | |

1. When a mailpiece limitation of 8 cells or 2 batteries is applicable, a mailpiece may contain either 8 cells or 2 batteries, not both.
2. Each lithium metal or lithium alloy cell must not contain more than 1.0 gram of lithium content.
3. Each lithium metal or lithium alloy battery must not contain more than 2.0 grams of aggregate lithium content.
4. Each lithium-ion or lithium polymer cell must not exceed more than 20 Wh (watt-hour rating).
5. Each lithium-ion or lithium polymer battery must not exceed 100 Wh.
6. Each lithium metal or lithium alloy cell or battery must not exceed 0.3 gram of lithium content.
7. Each lithium-ion or lithium polymer cell or battery must not exceed a watt-hour rating of 2.7 Wh.

USPS Packaging Instruction 9E

Lithium Metal and Lithium-ion Cells and Batteries — International and APO/FPO/DPO

Lithium metal (non-rechargeable) cells and batteries and lithium-ion (rechargeable) cells and batteries are mailable in limited quantities internationally or to and from APO, FPO, or DPO locations only when they are properly installed in the equipment they operate. Lithium batteries must also be accepted by the destination country as designated by the Individual Country Listing in the IMM. APO/FPO/DPO destinations are also subject to the conditions prescribed by the Department of Defense (DOD) as listed in *Overseas Military/Diplomatic Mail* in the *Postal Bulletin*.

Proper Shipping Name

- Lithium Metal Battery.
- Lithium-ion Battery.

ID Number

- Lithium Metal Battery contained in equipment, UN3091.
- Lithium-ion Battery contained in equipment, UN3481.

Mailability

- Lithium metal and lithium-ion cells and batteries *installed in* the equipment they are intended to operate (UN3091 and UN3481) are mailable.
- Lithium metal and lithium-ion cells and batteries *not packed in* equipment (i.e., batteries packed with equipment or individual batteries) are prohibited.

Required Packaging

Lithium Metal and Lithium-ion Batteries

- The equipment must be cushioned to prevent movement or damage, and must be contained in rigid outer packaging, sealed and strong enough to prevent crushing of the package or exposure of the contents during normal handling in the mail.
- All outer packages must have a complete delivery and return address.

Markings

- **Lithium metal** batteries properly *installed in* the equipment they are intended to operate:
 - Mailable internationally when permitted by country, including to and from APO, FPO, and DPO locations.
 - No lithium battery markings permitted. Quantities must be within the limits of [622.5](#) and as outlined below.

- **Lithium-ion** batteries properly *installed in* the equipment they are intended to operate:
 - Mailable internationally when permitted by country, including to and from APO, FPO, and DPO locations.
 - No lithium battery markings permitted. Quantities must be within the limits of [622.5](#) and as outlined below.

Quantities

International — Lithium Metal and Lithium-ion Cells and Batteries:

Installed in equipment:

- Each shipment may contain a maximum of four lithium-ion cells or two lithium-ion batteries.
- The total watt-hour rating for each cell must not exceed 20 Wh.
- The total watt-hour rating for each battery must not exceed 100 Wh.

Note: A lithium battery consignment, as defined in [349.12b](#), is limited to a maximum of two mailpieces for all international and APO/FPO/DPO mailings.

International — Very Small Lithium Metal and Lithium-ion Cells and Batteries:

Installed in equipment:

- Each shipment containing very small lithium cells and batteries, when installed in the equipment they operate (including circuit boards), may contain a maximum of four lithium cells or two lithium batteries.
- Lithium metal cells and batteries must contain no more than 0.3 gram of lithium content.
- Lithium-ion cells/batteries must have watt-hour rating of not more than 2.7 Wh.

Note: A lithium battery consignment, as defined in [349.12b](#), is limited to a maximum of two mailpieces for all international and APO/FPO/DPO mailings.

International Lithium Battery Mailability Exhibit

| | International APO/FPO/DPO¹ | Mailpiece Battery Limit |
|---|--|--------------------------------------|
| Lithium Metal or Lithium Alloy Batteries ^{2, 3} <i>Small, non-rechargeable, consumer-type batteries</i> | | |
| Contained in (properly installed in equipment) | Mailable | Maximum of 4 cells or 2 batteries |
| Packed with equipment, but not installed in the equipment | Prohibited | |
| Without the equipment they operate (individual batteries in originally sealed packaging) | Prohibited | |
| Lithium-ion or Lithium Polymer Batteries ^{4, 5} <i>Small, rechargeable, consumer-type batteries</i> | | |
| Contained in (properly installed in equipment) | Mailable | Maximum of 4 cells or 2 batteries |
| Packed with equipment, but not installed in the equipment | Prohibited | |
| Without the equipment they operate (individual batteries in originally sealed packaging) | Prohibited | |
| Very Small Lithium Metal or Lithium-ion Batteries ^{6, 7} <i>Exception for very small consumer-type batteries in international mailings</i> | | |
| Contained in (properly installed in equipment) | Mailable | Maximum of 4 cells or 2 batteries |
| Packed with equipment, but not installed in the equipment | Prohibited | |
| Without the equipment they operate (individual batteries in originally sealed packaging) | Prohibited | |

1. Unless otherwise prohibited by the international destination country or specific APO/FPO/DPO ZIP Code location.
2. Each lithium metal or lithium alloy cell must not contain more than 1.0 g lithium content.
3. Each lithium metal or lithium alloy battery must not contain more than 2.0 g aggregate lithium content.
4. Each lithium-ion or lithium polymer cell must not exceed more than 20 Wh per cell.
5. Each lithium-ion or lithium polymer battery must not exceed 100 Wh.
6. Each lithium metal or lithium alloy cell or battery must not exceed 0.3 g of lithium content.
7. Each lithium-ion or lithium polymer cell or battery must not exceed a watt-hour rating of 2.7 Wh.

Note: Shipments containing lithium batteries are not permitted in Global Express Guaranteed mailpieces.

USPS Packaging Instruction 10A

Small Quantity Provision

Some types of hazardous materials, as permitted in [336](#) and 49 CFR 173.4, may be prepared for mailing using the “small quantity” provision. The small quantity provision, like the ORM-D materials category, is unique within the United States, and its use is prohibited in international and APO/FPO/DPO mail.

Proper Shipping Name and ID Number

- Not applicable.

Prototype Testing Requirement

- The complete mailing package must be capable of withstanding the test criteria in 49 CFR 173.4(a)(6).

Mailability

- International Mail: Prohibited.
- Domestic Mail: Permitted via surface transportation only.

Required Packaging**Inner Receptacle**

- Each inner receptacle cannot be liquid-full at 131° F (55° C).
- Each inner receptacle must be constructed of plastic with a minimum thickness of no less than 0.2 mm (0.008 inch) or must be made of earthenware, glass, or metal.
- Each inner receptacle must be securely sealed with wire, tape, or other positive means.

Absorbent and Cushioning Material

- Sufficient absorbent material that will not react chemically with the hazardous material must fully surround each inner receptacle and be capable of absorbing the entire liquid contents of the inner receptacle(s) in case of leakage.
- Each primary receptacle must be surrounded by sufficient cushioning material to absorb shock and prevent breakage.
- The absorbent and cushioning materials used must not violate 49 CFR 173.21.

Secondary Packaging

- Each inner receptacle and the absorbent cushioning material must be placed within a securely sealed secondary packaging.

Outer Packaging

- The secondary packaging must be securely packed in a strong outer packaging.
- The total weight of each mailpiece must not exceed 64 pounds (29 kg).

Marking

- The address side of each mailpiece sent under the small quantity provision must be clearly marked with "This package conforms to 49 CFR 173.4 for domestic highway or rail transport only."
- A complete return address and delivery address must be used.

USPS Packaging Instruction 10B

Excepted Quantity Provision

Some types of hazardous materials, as permitted in [337](#) and 49 CFR 173.4a, may be prepared for mailing using the excepted quantity provision. The excepted quantity provision, although applicable to international shipments by commercial shippers, is limited to domestic mail, and its use is prohibited in international and APO/FPO/DPO mail.

Proper Shipping Name and ID Number

- Not applicable.

Prototype Testing Requirement

- The complete mailing package must be capable of withstanding the test criteria in 49 CFR 173.4a(f).

Mailability

- International Mail: Prohibited.
- Domestic Mail: Permitted via air or surface transportation (highway, rail, or vessel).

Required Packaging

Inner (Primary) Receptacle

- Each inner receptacle must be constructed of plastic, glass, porcelain, stoneware, earthenware, or metal. Plastic inner packaging must have a thickness of not less than 0.2 mm (0.008 inch).
- Each inner packaging with a removable closure must have its closure held securely in place with wire, tape, or other positive means.
- Each inner receptacle having a neck with molded screw threads must have a leak-proof, threaded-type cap.
- Closures must not react chemically with the material.

Intermediate (Secondary) Packaging

- Each inner receptacle must be securely packed in an intermediate container with cushioning material in such a way that, under normal conditions of transport, will not break, be punctured, or leak.
- Intermediate containers must completely contain the contents in case of breakage or leakage, regardless of package orientation.

Absorbent and Cushioning Material

For liquids, intermediate containers must contain sufficient absorbent material that:

- Will absorb the entire contents of the inner packaging.
- Will not react dangerously with the material or reduce the integrity or function of the packaging materials.
- The absorbent material may be the cushioning material.

Outer Packaging

- The intermediate packaging must be securely packed in strong, rigid outer packaging.
- Placement of the material in the package must not violate 49 CFR 173.21.
- Outer packages must be of such a size that there is adequate space to apply all necessary markings.

Markings

- Mailpieces must be durably and legibly marked with the following marking:



- The “**” must be replaced by the primary hazard class, or when assigned, the division of each of the hazardous materials contained in the package. The “**” must be replaced by the name of the mail owner or mail service provider, if not shown elsewhere on the package.
- The marking must be located on the address side of the mailpiece, not be less than 100 mm (3.9 inches) by 100 mm (3.9 inches), and must be durable and clearly visible.

Documentation

- For ground transportation (highway or rail), no shipping paper is required.
- For surface transportation by vessel, a shipping paper is required and must include the statement “Dangerous Goods in Excepted Quantities” and indicate the number of packages.
- For transport by air, a shipping paper is not required.

USPS Packaging Instructions 10C

Cremated Remains

Human and animal ashes are permitted for mailing with restrictions, provided they are properly double-packaged and labeled. For international shipping, cremated remains are permitted to be mailed provided they are not otherwise prohibited by the destination country (see the Individual Country Listings in the IMM) and all packaging and marking requirements are met.

Proper Shipping Name

Not applicable.

ID Number

Not applicable.

Mailability

- International Mail: When permitted by the destination country only via Priority Mail Express International service (this class of mail must also be available to the destination country).
- Domestic Mail: Permitted via Priority Mail Express service only.

Required Packaging

Primary Container

- International: A funeral urn is required as the inner container. It must be sealed and siftproof.
- Domestic: The inner container must be strong and durable and be constructed in such a manner as to protect and securely contain the contents inside and it must be properly sealed so that it is siftproof.

Note: A siftproof container is any vessel that does not allow loose powder to leak or sift out during transit.

Cushioning Material

- For both domestic and international shipping, the space between the primary receptacle and the outer packaging must contain enough material to keep the item stable during transit and to absorb the shock to prevent breakage.

Outer Container

- For both domestic and international shipping, the outer container must be strong, durable, and siftproof. Insert your inner container into the shipping box and add padding to the bottom, sides, and top to prevent movement. Make sure there is no movement of contents within the shipping box.

Note: It is recommended that all packages contain a slip of paper with the sender's and recipient's address and phone number. This will provide Postal employees with a means to contact you if the outer mailing label is damaged or found missing during transit.

Marking

- Domestic: A complete return address and delivery address must be used. The Priority Mail Express mailpiece (USPS-produced or customer supplied) must be marked with Label 139, *Cremated Remains*, affixed to all sides (including top and bottom), or a mailer may use the special Priority Mail Express cremated remains branded box (BOX-CRE) available on usps.com.
- International: A complete return address and delivery address must be used. The mailer must indicate the contents (Cremated Remains) on the required applicable customs declaration form. The Priority Mail Express International mailpiece (USPS-produced or customer supplied) must be marked with Label 139, *Cremated Remains*, affixed to all sides (including top and bottom), or a mailer may use the special Priority Mail Express cremated remains branded box (BOX-CRE) available on usps.com.

Documentation

- International: A complete and accurate customs label is required and must indicate the contents of the package. If available, the cremation certificate should be attached to the outer packaging, or made easily accessible. The sender is responsible for obtaining all the necessary permissions required by the national laws in the country of origin and the country of destination prior to dispatching these items.

USPS Packaging Instruction 10D

Adult Bird Boxes

Disease-free adult birds may be mailed domestically when shipped under all applicable governmental laws and regulations, including the Lacey Act, the Endangered Species Act (ESA), the Animal Welfare Act, regulations of the U.S. Department of Agriculture, U.S. Fish and Wildlife Service, and any state, municipal, or local ordinances. Each container must meet container specifications. See [521](#), [522](#), and [526.4](#).

Proper Shipping Name

Not applicable.

ID Number

Not applicable.

Mailability

- International Mail: Prohibited.
- Domestic Mail: Permitted via Priority Mail Express service only.

Required Packaging

Containers must be designed with consideration of the birds' comfort, awareness, health, and welfare, including possible temperature fluctuations that may occur during transport. In addition, the container must:

- Remain intact and withstand crushing during transportation.
- Prevent the birds from puncturing or breaking any part of the container with their own force, or escaping from the container.
- Contain shavings or similar absorbent material to prevent damage to the bottom of the container.
- Have a secure window (covered and sturdy) designated for a visible inspection of the birds.
- Provide sufficient exposure to air to allow the birds to breathe normally through filter-covered ventilation that minimizes the chance of handler contact with solid or aerosolized waste.

Marking

Each container must be marked with the following information:

- “Live Birds — USPS Approved Container # (once issued).”
- Complete sender’s and recipient’s addresses (including phone numbers) on the outer packaging for the necessary notification by Postal Service personnel.
- Directional arrows indicating “up” position (on at least two sides of the container).

Appendix D

Hazardous Materials Definitions

Aerosol means any nonrefillable metal receptacle containing a gas that is compressed, liquified, or dissolved under pressure, the sole purpose of which is to expel a nonpoisonous (other than a Division 6.1 Packing Group III material) liquid, paste, or powder and fitted with a self-closing release device allowing the contents to be ejected by the gas.

Air transportation requirements apply to all mailable hazardous materials sent at Priority Mail Express, Priority Mail, First-Class Mail, or First-Class Package Service prices for domestic shipments, or Priority Mail Express International, Priority Mail International, First-Class Mail International, and First-Class Package International Service prices for international shipments. All mailable hazardous materials sent at those prices must meet the requirements that apply to air transportation. Mailable hazardous materials sent at any of those prices may or may not be transported via air depending on the distance between the point of origination and the point of destination, and the ability of the USPS to obtain an air carrier between those points.

Ammunition includes all kinds of bombs, grenades, rockets, mines, projectiles, and other similar devices or contrivances. Ammunition is a Class 1 explosive and is nonmailable.

ASTM refers to the American Society for Testing and Materials.

Batteries, dry are sealed, nonvented batteries of the type used in flashlights or for the operation of small household apparatus. They contain zinc salts and other solids, or may be of the nickel cadmium type or other combinations of metals.

Biohazard is a biological material that poses a threat to humans or the environment. The biohazard symbol that is required for certain Division 6.2 materials is an OSHA requirement detailed in 29 CFR 1910.1030.

Biological products means a material derived from a living organism that is prepared and manufactured in accordance with 9 CFR 102-104 (licenses for biological products; experimental products, distribution, and evaluation prior to licensing; and permits for biological products), 21 CFR 312 (investigational new drug application), or 21 CFR 600-680 (biologics) and that, under such provisions, may be shipped in interstate commerce. Biological products include, but are not limited to, products such as vaccines.

Btu means British thermal unit.

C means degrees Celsius or Centigrade. Celsius or Centigrade is a thermometer scale on which the freezing and boiling points of water are divided into 100, with 0° representing the freezing point and 100° the boiling point.

Cargo aircraft only means an aircraft that is used to transport cargo and is not engaged in carrying passengers.

Ci means curie.

Clinical (diagnostic) specimen is any human or animal material including, but not limited to, excreta, secreta, blood, blood components, tissue, and tissue fluids that have been collected and are being mailed to a medical or forensic laboratory for the purpose of diagnosis, or being mailed from a medical or forensic laboratory for return to a law enforcement agency.

Combination packaging means one or more inner packagings (i.e., receptacles) secured in a nonbulk outer packaging. This is a term used by DOT in 49 CFR.

Combustible liquid is a Class 3 material in a liquid form that has a flashpoint above 140° F (60° C) and below 200° F (93° C).

Compatibility group refers to a designated alphabetical letter used to categorize different types of Class 1 explosive substances and articles for purposes of safe stowage and segregation (e.g., Division 1.4S).

Composite packaging consists of an outer packaging and an inner receptacle so constructed that they form an integral unit. Once assembled, it remains a single integrated unit; it is filled, stored, shipped, and emptied as such. This is a term used by DOT in 49 CFR.

Compressed gas is a material or mixture within a container that is a gas at 68° F (20° C) or less and 14.7 psi (101.3 kPa), or exerts an absolute pressure of 40.6 psia (280 kPa) or greater at 68° F (20° C). Gases are Class 2 hazardous materials.

Consumer commodity is a hazardous material that is packaged and distributed in a quantity and form intended or suitable for retail sale and designed for individual consumption for personal care or household use purposes. This term can also include certain drugs or medicines.

Corrosive material means a Class 8 liquid or solid material that causes visible destruction of human skin at the site of contact within a specified period of time. A liquid that has a severe corrosion rate on steel or aluminum is also a corrosive material.

Dangerous goods is the term used to describe hazardous materials shipped in international commerce.

Dangerous when wet material is a Division 4.3 material that by contact with water is liable to become spontaneously flammable or to give off flammable or toxic gas.

De minimis is the maximum quantity of Packing Group II & III in Class 3, Division 4.1, Division 4.2, Division 4.3, Division 5.1, Division 6.1, Class 8, and Class 9 materials that do not meet the definition of hazardous material. Inner receptacles or articles are limited to One (1) ml (0.03 ounce) for liquids; and One (1) gram (0.04 ounce) for solid materials and 100 ml (3.38 ounces) for liquids; and 100 g (0.22 pounds) for solid materials total aggregate per mailpiece. De minimis does not apply to prohibited items (e.g., mercury, hydrofluoric acid).

Designated facility is (for EPA purposes) the hazardous waste treatment, storage, or disposal facility that has been designated on a hazardous waste manifest by the waste generator.

Diagnostic specimen, see clinical specimen.

Division refers to a subpart of a hazard class (e.g., Division 6.1).

DOD refers to the U.S. Department of Defense.

Domestic transportation is transportation between locations within the United States.

DOT refers to the U.S. Department of Transportation. DOT has the federal authority to regulate the transportation of hazardous materials within domestic commerce. DOT regulations are codified in Title 49, Code of Federal Regulations (49 CFR).

Elevated temperature material means a material that, when offered for transportation, is in a liquid phase and at a temperature at or above 212° F (100° C); is in a liquid phase with a flashpoint at or above 100° F (37.8° C) that is intentionally heated and offered for transportation at or above its flashpoint; or is in a solid phase and at a temperature at or above 464° F (240° C). Elevated temperature materials are Class 9 hazardous materials and are nonmailable.

EPA refers to the U.S. Environmental Protection Agency. EPA regulations are codified in Title 40, Code of Federal Regulations (40 CFR).

Etiologic agent, see infectious substance.

Explosive is any Class 1 substance or article, including a device, that is designed to function by explosion (i.e., an extremely rapid release of gas and heat) or that, by chemical reaction within itself, is able to function in a similar manner.

F means degrees Fahrenheit. Fahrenheit is a thermometer scale on which the boiling point of water is 212° above zero and the freezing point is 32° above zero.

Flammable gas is a Division 2.1 material that is ignitable at 14.7 psi (101.3 kPa) when in a mixture of 13 percent or less by volume, or has a flammable range at 14.7 psi (101.3 kPa) with air of at least 12 percent regardless of the lower limit.

Flammable liquid is a Class 3 material in a liquid form that has a flashpoint of not more than 140° F (60° C), or any material in a liquid phase with a flashpoint at or above 100° F (38° C).

Flammable solid is a Division 4.1 material that includes any solid material (other than one classed as an explosive) that under normal transport and handling conditions is likely to cause fire through friction or retained heat from manufacturing or processing, or that can be ignited readily and, when ignited, can burn vigorously and persistently and create a serious transportation hazard.

Flashpoint means the minimum temperature at which a liquid gives off vapor within a test vessel in sufficient concentration to form an ignitable mixture with air near the surface of the liquid. The test criteria is cited in 49 CFR 173.120(c).

Gas means a material that has a vapor pressure greater than 43.5 psi (300 kPa) at 122° F (50° C) or is completely gaseous at 68° F (20° C) at a standard pressure of 14.7psi (101.3 kPa). Also, see compressed gas.

Hazard class means the category to which a hazardous material is assigned under the definitions set by DOT in 49 CFR. Even though a material is assigned to only one hazard class, it may meet the defining criteria for more than one hazard class. Some hazardous materials may also have subsidiary hazard class assignment.

Hazard zone refers to one of the four levels of hazards (Hazard Zones A through D) assigned to gases and liquids that are poisonous by inhalation. A hazard zone is based on the LC₅₀ value for acute inhalation and toxicity of gases and vapors. Hazardous materials assigned a hazard zone are nonmailable.

Hazardous material is any article or substance designated by the U.S. Department of Transportation (DOT) as being capable of posing an unreasonable risk to health, safety, or property during transportation. In international commerce, hazardous materials are known as “dangerous goods.”

Hazardous substance is a hazardous material that when shipped in certain quantities can be an environmental hazard. Appendix A in 49 CFR 172.101 lists all hazardous substances. All hazardous substances are hazardous materials, but not all hazardous materials are hazardous substances. Hazardous substances are nonmailable.

Hazardous waste is any material subject to the Hazardous Waste Manifest Requirements of EPA as specified in 40 CFR 262. The only type of hazardous waste permitted in domestic mail is medical waste (i.e., sharps and other medical devices) as specified in [346](#).

IATA refers to the International Air Transportation Association. IATA annually publishes the IATA Dangerous Goods Regulations, which provides procedures for shippers to prepare hazardous materials for safe transport by air via commercial air transportation. The IATA regulations contain all of the ICAO Technical Instructions as well as some more restrictive requirements that reflect air transport industry standard practices or operational considerations.

ICAO refers to the International Civil Aviation Organization. ICAO biannually publishes the Technical Instructions for the Safe Transport of Dangerous Goods by Air, which specifies the procedures for shipping hazardous materials via air transportation and is recognized by DOT in 49 CFR 171.11.

ID8000 is a miscellaneous hazardous class specific to certain materials within Classes 2, 3, 6.1, and 9 that can qualify as a mailable consumer commodity material and are reclassified as ID8000 when intended for air transportation.

IMO refers to the International Maritime Organization, which provides requirements for shipping hazardous materials via waterways.

Infectious substance (etiologic agent) is a Division 6.2 material that is a viable microorganism, or its toxin, and causes or may cause disease in human beings or animals, and includes those agents listed in 42 CFR 72.3

and any other agent that causes or may cause severe, disabling, or fatal disease. The terms “infectious substance” and “etiologic agent” are synonymous.

Inhalation hazard, see hazard zone.

Inner receptacle, see primary receptacle.

Irritating material is any Division 6.1 liquid or solid substance (e.g., tear gas) that gives off intense fumes and causes extreme but temporary irritation and impairment to a person’s ability to function.

kPa means kilopascals.

L or l means liter.

Limited Quantity is the maximum amount of a specific hazardous material that is exempted from the labeling or packaging requirements in 49 CFR. To be permitted in the Postal Service, hazardous materials that are classified to be shipped as Limited Quantity must also qualify as a consumer commodity material. See Consumer Commodity, Limited Quantity air and Limited Quantity surface.

Limited Quantity Air is a category unique to the Postal Service of a hazardous material in hazard Classes 5, 8, and portions of 9 that presents a limited hazard specifically in air transportation and is mailable under certain conditions in Postal Service air networks.

Limited Quantity Surface is a material that contains a limited quantity of a hazardous material that presents a limited hazard during transportation due to its form, quantity, and packaging, specific to the Postal Service, and is restricted to surface transportation. This category generally must also qualify as a consumer commodity to be accepted in the Postal Service network. This material was previously classified as ORM-D.

Liquid is a material, other than an elevated temperature material, with a melting point of 68° F (20° C) or lower at a standard pressure of 14.7 psi (101.3 kPa).

Liquid phase means a material that meets the definition of a liquid when elevated at the higher of the temperature at which it is offered for transportation, not at the 100° F (38° C) temperature.

Mailable Limited Quantity is a hazardous material in hazard Classes 4, 5, 8 or portions of 9 that presents a limited hazard during transportation (specifically air transport), and is mailable in USPS air networks under certain conditions and in limited quantities.

Magnetized material is an article that has a magnetic field strength capable of causing the deviation of aircraft instruments and producing erroneous aircraft magnetic compass readings.

Marine pollutant is any hazardous material listed in Appendix B of 49 CFR 172.101, including mixtures or solutions of certain concentrations that are capable of polluting water habitats. Marine pollutants are not mailable.

Material Safety Data Sheet (MSDS), see **Safety Data Sheet (SDS)**.

Maximum capacity means the maximum volume permitted in the inner receptacle or packaging.

Miscellaneous hazardous materials are Class 9 substances or articles that present a hazard during transportation but do not meet the definition of any other hazard class. Examples are dry ice and magnetized materials.

ml means milliliter.

mm means millimeters.

NA number refers to the North American (NA) four-digit identification number assigned to a hazardous material that is not recognized for international transportation. Hazardous materials having NA numbers may be shipped in commercial commerce only within the United States or between the United States and Canada. Hazardous materials with NA numbers may be mailed within the United States only as permitted in Chapter [3](#).

Nonflammable gas is a Division 2.2 material that exerts an absolute pressure of 40.6 psia (280 kPa) or greater at 68° F (20° C). **n.o.s.** means not otherwise specified.

Organic peroxide is a Division 5.2 material that includes any organic compound containing oxygen in the bivalent structure and that may be considered a derivative of hydrogen peroxide, where one or more of the hydrogen atoms have been replaced by organic radicals.

ORM means other regulated material.

ORM-D (other regulated materials for domestic transport only) was a marking for mail or shipping in the United States. Packages bearing this mark contained hazardous material in a limited quantity that present a limited hazard during transportation, due to its form, quantity, and packaging. ORM-D was phased out by the U.S. Department of Transportation on Jan. 1, 2021.

OSHA refers to the Occupational Safety and Health Administration of the U.S. Department of Labor. OSHA regulations are codified in Title 29, Code of Federal Regulations (29 CFR).

Other medical devices are Division 6.2 materials that include all articles or devices used in animal or human patient care or treatment or in medical research that are not, or do not contain, a projecting sharp and are not known or not reasonably believed to contain an infectious substance (etiologic agent).

Outer packaging is the outermost enclosure that provides protection against the unintentional release of the contents under normal handling conditions. The outer packaging holds the primary receptacle, the secondary packaging (if required), and the absorbent material and cushioning. The outer packaging bears the addressing information along with all required markings and labels.

Oxidizing gas means a gas that more than air may cause or contribute to the combustion of other material by generally providing oxygen.

Oxidizing substance is a Division 5.2 material that may, generally by yielding oxygen, cause or enhance the combustion of other materials.

Packing group (PG) is the DOT grouping assignment that is based on the degree of danger present in an individual hazardous material. Packing Group I indicates a great danger; Packing Group II, medium danger; Packing Group III, minor danger. Not every hazard class uses packing group assignments. ORM-D materials most often fall within Packing Group III.

Passenger-carrying aircraft means an aircraft that carries any person other than a crew member or company employee, an authorized representative of the United States, or a person accompanying the shipment.

Poisonous gas, see toxic gas.

Poisonous material, see toxic substance.

Primary hazard refers to the single or most dangerous hazard characteristic of a hazardous material (i.e., hazard class or division assignment).

Primary receptacle is the innermost container (i.e., tube, vial, bottle, vessel) that holds the hazardous material. Sometimes the primary receptacle may be referred to as the inner receptacle or the primary container.

Proper shipping name is the name of a hazardous material that must be used to identify a substance or article in the shipping documents and on the packaging, as required. See Appendix [A](#) and [B](#) for listings of proper shipping names.

psi means pounds per square inch.

psia means pounds per square inch absolute.

psig means pounds per square inch gauge.

Pyrophoric material is a liquid or solid that, even in a small amount and without an external ignition source, can ignite within 5 minutes after coming in contact with air.

Radiation level means the radiation dose-equivalent rate expressed in millisievert per hour (mSv/h) or millirem per hour (mrem/h).

Radioactive instrument or article means any manufactured instrument or article, such as an instrument, clock, electronic tube or apparatus, or similar item, having a Class 7 radioactive material in gaseous or nondispersible solid form as a component part.

Radioactive material is defined in 49 CFR 173.403 as any material containing radionuclides where both the activity concentration and the total activity in the consignment exceed the values specified in the table in 49 CFR 173.436 or values derived according to the instructions in 49 CFR 173.433. Activity limits for mailable Class 7 radioactive materials are listed in [Exhibit 347.22](#).

Regulated medical waste is the DOT term for a Division 6.2 waste or reusable material, other than a culture or stock of an infectious substance, that may or may not contain an infectious substance and is generated from: the diagnosis, treatment, or immunization of human beings or animals; research pertaining to the diagnosis, treatment, or immunization of human beings or animals; or the production or testing of biological products. Only the types of medical waste named in [346](#) are mailable.

Reportable quantity (RQ) mean the minimum amount of a hazardous substance that is subject to the additional marking and documentation requirements in Appendix A of 49 CFR 172.101. A hazardous material having an RQ is nonmailable.

Residue means the hazardous material remaining in a packaging after the contents have been unloaded to the maximum extent practicable and before the packaging is either cleaned, refilled, or properly disposed of.

Rigid means unable to bend or be forced out of shape; not flexible. A rigid outer shipping container or rigid packaging is generally interpreted to mean a fiberboard (cardboard) box or outer packaging of equivalent strength, durability and rigidity.

Safety Data Sheet (SDS) is a document that details the physical characteristics and health hazards of a chemical or hazardous product. In 29 CFR 1910.1200(g), OSHA requires chemical manufacturers, distributors, and importers to provide SDSs to communicate the hazards of hazardous chemicals they produce or import, and provide copies to their customers. OSHA also requires that employers have an SDS on hand for each hazardous chemical present in their workplace. For postal purposes, the information on an SDS can be useful in determining the mailability of a hazardous material.

Salvage packaging is a special form of packaging into which damaged, defective, or leaking hazardous materials packages are placed for purposes of recovery or disposal. Salvage packaging must meet the specifications in 49 CFR 173.3.

Secondary packaging container is the packaging component into which the primary receptacle(s) and any required absorbent and cushioning material is securely placed. The packaging of certain mailable hazardous materials requires the use of a secondary container. The secondary packaging container is then secured in an outer shipping container.

Self-heating material is a material that, when in contact with air and without an energy supply, is liable to self-heat and may spontaneously ignite.

Sharps is a Division 6.2 material that includes any item of medical waste having a projecting cutting edge or fine point that was used in animal or human patient care or treatment or in medical research or industrial laboratories. The term includes, but is not limited to, hypodermic needles, syringes (with or without the attached needles), pasteur pipettes, scalpel blades, blood vials, needles with attached tubing, and culture dishes (regardless of the presence of infectious agents). Also included are other types of broken or unbroken glassware that were in contact with infectious agents, such as used slides or cover slips. The term does not include new unused medical devices such as hypodermic needles, syringes, and scalpel blades.

Shipping papers means the shipping order, bill of lading, manifest, or other shipping document that contains the information required by 49 CFR 172.200 through 172.204. Most hazardous materials (including ORM-D materials) sent via air transportation require a shipper's declaration for dangerous goods. See [326](#) and [Exhibit 326](#). The Packaging Instructions in [Appendix C](#) specify when a shipper's declaration is required.

Siftproof packaging means a packaging that is impermeable to dry contents, including any fine solid material produced during transportation.

Small quantity is the maximum amount of a specific hazardous material that is not subject to any requirements other than those in 49 CFR 173.4. Not every hazardous material is eligible to be shipped as a small quantity. The

small quantity provision is recognized for use within the United States only. A hazardous material cannot be sent in international mail using the small quantity provision.

Solid is a material that is not a liquid or a gas.

Solution is any homogeneous liquid mixture of two or more chemical compounds or elements that will not undergo any segregation under normal transportation conditions.

Specific activity refers to the activity of the radionuclide per unit mass of that nuclide for a Class 7 material.

Specification packaging means a packaging conforming to one of the specifications or standards in 49 CFR 178 and 179. ORM-D materials do not require specification packaging (but they must meet postal packaging requirements).

Spontaneously combustible material is a pyrophoric or a self-heating material that is capable of spontaneous ignition.

Subsidiary hazard means a hazard characteristic, other than the primary hazard, present in a hazardous material that is of lesser significance than the primary hazard.

Surface transportation requirements apply to all mailable hazardous materials sent at the USPS Retail Ground, Parcel Select, or USPS Marketing Mail Parcel prices and must meet the requirements that apply to surface transportation.

TBq means terabecquerel.

Toxic gas is a Division 2.3 material that is poisonous by inhalation and is a gas at 68° F (20° C) or less and a pressure of 14.7 psi (101.3 kPa); or a material that has a boiling point of 68° F (20° C) or less at 14.7 psi (101.3 kPa).

Toxic substance means a material, other than a gas, that is known to be so toxic to humans as to cause death, injury, or harm to health if swallowed, inhaled, or contacted by the skin. See [346](#) for information on toxicity levels.

UN number refers to the United Nations (UN) four-digit identification number assigned to a hazardous material that is recognized for use in international and domestic commerce and transportation.

UN standard packaging means a packaging that conforms to the standards in the UN Recommendations on the Transport of Dangerous Goods.

Viscosity is the tendency of a fluid to resist internal flow without regard to its density.

Volatility refers to the relative rate of evaporation of materials to assume a vapor state at ordinary temperatures.

Water reactive material, see dangerous when wet material.

Water resistant means having a degree of resistance to permeability and damage caused by water.

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References

Postal Service Publications and Reference Materials

- *Mailing Standards of the United States Postal Service, Domestic Mail Manual (DMM®).*
- *Mailing Standards of the United States Postal Service, International Mail Manual (IMM®).*
- *Postal Operations Manual (POM).*
- *Administrative Support Manual (ASM).*
- Publication 14, *Prohibitions and Restrictions on Mailing Animals, Plants, and Related Matter.*
- Handbook EL-812, *Hazardous Materials and Spill Response.*
- *Aviation Mail Security, Management Instructions.*
- Notice 107, *Let's Keep the Mail Safe.*
- Poster 298, *DOT Hazardous Materials Warning Labels and Markings.*
- Poster 702, *Dangerous Goods Warning Labels Prohibited in International Mail.*

Other Publications

- Title 18 of the United States Code (U.S.C.) 921, 1715, 1716 (18 U.S.C. 921, 1715, 1716).
- 39 U.S.C. 3001 (nonmailable matter).
- 21 U.S.C. 801–830 (drugs).
- Title 29 *Code of Federal Regulations* (29 CFR), Occupational Safety and Health Administration (OSHA), U.S. Department of Labor.
- 42 CFR, Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC).
- 49 CFR, Parts 100–185, U.S. Department of Transportation (DOT).
- International Civil Aviation Organization (ICAO), *Technical Instructions for the Safe Transport of Dangerous Goods by Air.*
- International Air Transport Association (IATA), *Dangerous Goods Regulations.*

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